

**OPTIONS FOR FEDERAL FUNDING FOR
STATE COSTS UNDER HEALTH CARE
REFORM**

FINAL REPORT

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CHAPTER I: INTRODUCTION

For the past few years, reform of the Medicaid program has become a priority for advocates and policymakers across the political spectrum. The motivations for reforming the program are varied, however. The program has been criticized on the following grounds:

- equity with respect to how states are reimbursed for their expenditures relative to one another;
- equity with regard to how eligibility and benefits differ for similar individuals living in different states; and
- the level and rate of growth in program expenditures.

In addition, the appropriate avenue for integrating Medicaid into broader national health care reform plans has also been a concern. Given its size and joint state and federal financing structure, the Medicaid program is a centerpiece in the debate over the appropriate allocation of responsibilities across different levels of government.

The issue of interstate equity cuts across all of the problems of and motivations for Medicaid reform mentioned here. Although equity issues have not been the focus of much of the reform debate thus far, any alteration to the current Medicaid program will introduce a redistribution of federal dollars across states and is very likely to alter the states' own contributions to their programs. The distributional effects inherent in modifications to Medicaid are critical for determining both the advisability and the political viability of each of the proposals that are being advanced. Even if no substantial modifications to the Medicaid program are implemented, evidence supports the claim that the current distribution of spending in the program is inequitable and that the formula used to determine the state and federal shares of spending should be re-examined.

The importance to states of the Medicaid program as a source of federal funds makes any reform of the program extremely contentious. As of fiscal year 1993, federal funding for the Medicaid program was approximately 39 percent of total (\$195 billion) federal grants-in-aid (U.S. Bureau of the Census). The Medicaid program is also the second largest single item in state budgets (National Association of State Budget Officers, 1993). In addition, changes that are budget neutral for the federal government would leave some states winners and others losers, making debate strictly on the merits of particular reform options all the more difficult to achieve, and any reforms all the more unlikely. But, if Medicaid remains a large and growing source of health coverage for low income Americans, the mechanism for allocating funding burdens represents a critical tool for affecting that coverage.

Current effective divisions of federal and state financing burdens can differ significantly from the explicit shares, and have had important affects on the rate of growth in overall program costs. For example, a significant share of the program growth during the 1988-1992 period can be attributed to a number of creative endeavors by many of the states. Chief among these entrepreneurial efforts was the financing of previously "state-only" programs through Medicaid (making them eligible for federal matching funds), and the use of provider taxes and donations to generate large federal disproportionate share hospital payments. The increased federal funding that these policies provided to some states was not related to need nor any relative measure of state ability to pay; as a result, federal program costs were driven up without even a rational or equitable framework for allocating the increased spending. Although a halt has been called on many of these activities, many states retain a substantial payment from the federal government resulting from these efforts. These issues are relevant under a broad health reform scenario, if the Medicaid program continues largely as under the status quo, or under any reform that locks in current funding levels.

During the 1993-94 health care reform debate, a prominent issue was whether and how the Medicaid population would be incorporated into a broader new health care financing system. A mechanism included in many of the reform bills was to require states to make “maintenance of effort” payments—in essence state contributions to the financing of new federal program costs based upon the state savings resulting from reforms. The manner in which each state’s payment would be determined, however, raises complex state equity issues.

The objective of this report is to highlight the distributional inequities inherent in the current Medicaid program as well as estimate the magnitude of the redistribution of funds and payment requirements that would result from the implementation of a number of different types of reform. First, we analyze the case where the Medicaid program is maintained in its current matching program structure, but where the formula is modified to correct inequities in the current formula. Second, we examine the state financing implications of full or partial integration of the Medicaid program into a broad based national health care reform. The third section addresses Medicaid’s disproportionate share hospitals (DSH) program. Distributional issues related to DSH are relevant under both Medicaid program reform scenarios. The issues discussed in this work are also relevant for any discussion of block grant or swap proposals. Under block grants and swaps, the current distribution of federal funds across states could be locked into place, or the proposals could be structured so as to redistribute federal funding. Although our discussion will highlight the applicability of our analysis to these types of reforms, block grants and swaps will be analyzed in detail in future research.

The Structure of the Current Medicaid Program and its Problems

Medicaid is a program that provides payment for medical services for categorically eligible low income parents and children as well as for some acute and long term care services for the aged and disabled. Coverage is also available for certain low income individuals with extraordinary medical expenses. State Medicaid programs are financed by a combination of state and federal dollars.

As structured today, the Medicaid program is an open-ended, single rate matching program. A matching program is one under which the federal government agrees to share the costs of a program as a function of the state's actual spending. An open-ended matching program is one in which the federal government does not cap its total contributions to the program; states can incur expenses of any magnitude and the federal government will continue to pay its pre-determined share of those expenses. Under a single rate matching program, the federal share of expenses is set at a single rate; under a multi-rate matching program the federal share varies by the total amount spent. For example, under the single rate Medicaid program, one federal matching rate is calculated for each state, with that rate guaranteed to be at least 50 percent but not more than 83 percent. Under a multi-rate program the federal match might be high for spending up to a specified limit, with a lower matching rate for expenses in excess of that limit.

A formula based largely upon relative state per capita personal income is used to calculate the Federal Medical Assistance Percentage (FMAP) for each state. The FMAP signifies the guaranteed federal share of funding for Medicaid and for seven other programs as well.¹ The FMAP

¹ The other seven programs are: Aid to Families with Dependent Children (AFDC), Foster Care, Adoption Assistance, Job Opportunities and Basic Skills (JOBS), Child Care and Supportive Services, Transitional Child Care, and At-Risk Child Care.

formula calculates the federal share of spending for each state; the state share is equal to one minus the FMAP. The formula is as follows:

$$FMAP = \text{federal share} = 1 - \left[\left(\frac{\text{state per capita personal income}}{\text{national per capita personal income}} \right)^2 \times 0.45 \right]$$

where $.50 \leq FMAP \leq .83$

Unfortunately, no clear consensus on the objective of the program nor on the intent of the formula exists for Medicaid. The original legislative intent was ambiguous. Policy analysts, states, and the federal government continue to hold divergent views on the role of Medicaid in the health care/welfare system. These inconsistencies complicate efforts to improve upon the program's existing structure, since there is little agreement as to what the goals or emphasis of such reforms should be.

The Medicaid program, enacted in 1965, was originally intended as an extension of the Kerr-Mills Act of 1960; consequently, it is possible to gain some insights into the objectives of the Medicaid program by examining the intent of Kerr-Mills (Stevens and Stevens 1974). Kerr-Mills increased federal matching grants for medical vendor payments on behalf of welfare recipients covered under the existing old-age assistance program and provided support for vendor payments on behalf of the poor elderly who were not receiving cash assistance—the medically needy. The main concern of legislators enacting the Kerr-Mills Act seemed to be that medical expenses not overwhelm the redistributive goals of cash assistance programs—the Act was not envisioned as a health insurance mechanism, but as an expansion of the public welfare system, hence the connection between welfare status and Medicaid eligibility. In fact, denial of the perception that the program represented a right to comprehensive health services for the poor appears to have been critical in the political acceptability of the program.

The imminent passage of the Medicare program's universal health care coverage for the elderly was to free up some state resources. Legislators used the Kerr-Mills open-ended matching framework to provide payments on behalf of the non-elderly population enrolled in cash assistance programs and the non-elderly medically needy, as well as continuing some coverage of the low income elderly for expenses not paid by Medicare, such as long term care.

While much of the language that surrounded the implementation of Medicaid framed the program as comprising incremental extensions of previous programs, some rhetoric also focused on the program as a vehicle to provide comprehensive care to the indigent and a movement toward equality in medical care. Given the lack of clarity regarding eligible populations and benefits and the ambiguity of goals, individual states and federal legislators used the program to pursue their differing agendas.

The FMAP formula suffers from equally unspecified objectives. Familiarity gained through the Kerr-Mills program, not specific allocation goals, seems to have been the most compelling reason for its use (Stevens and Stevens, 1974). Although the original intent is unclear, various objectives have been associated with the program by interested parties. A few of the most often cited policy objectives are:

- Adjusting the distribution of tax burden, accounting for state fiscal capacity;
- Reducing program benefit disparities across states;
- Compensating for differences in states' health care needs;
- Allowing for some state flexibility in benefits and eligibility.

Adjusting financing burdens to take into account state fiscal capacity is the major focal point of this report. There is widespread agreement (Blumberg, et al, 1993; US General Accounting Office, 1983; US Department of Health and Human Services, Office of Inspector General, 1991) that the current FMAP's measure of fiscal capacity, relative state per capita personal income, is an

inaccurate measure of relative state ability to pay. The measure is calculated using state-specific data in conjunction with the National Income and Product Accounts (NIPA) national personal income measure. Among other deficiencies, it includes a number of non-taxable sources of income while excluding a number of important sources of revenue. Such problems significantly affect the equitable distribution of federal funds across states.

The elimination of significant benefit disparities across states should, theoretically, be the easiest objective to achieve. The most straightforward approach is to more stringently regulate Medicaid benefit and eligibility standards through mandates at the federal level. Indeed, more of the benefits and coverage have been federally mandated in recent years, leading to some reduced state flexibility in terms of optional services. The success with which these particular mandates have increased beneficiary equity across states is mixed, however.² Although some adjustments to the FMAP may reduce the variance in benefits to some degree, manipulating the formula is an inefficient and very limited mechanism for addressing that issue. A number of states with very high FMAPs under the current system—Alabama, Arkansas, Mississippi, New Mexico, and Utah, for example—are among the states with the lowest per capita Medicaid spending.

Chapter II, nonetheless, focuses on the FMAP itself, examining alternative ways to structure the formula in an effort to improve, at a minimum, cross-state equity. Much of the effort concentrates on improving the fiscal capacity measure in the formula. The per capita personal income component of the formula is flawed since it does a poor job of capturing the possible tax bases available to a state. Consequently, we examine adjustments to improve the per capita

² Adams found that between 1984 and 1992, the cross state variation in the number of Medicaid enrollees as a percentage of the number of poor residents has declined (coefficient of variation falling from 38.1% to 21.7%). Cross state variation in real expenditures per poor person fell over that time period as well. However, the variation in state real expenditures per enrollee was greater in 1992 than in 1984, having worsened between 1991 and 1992. This result is found even when excluding disproportionate share hospital spending. See "Equity in the Medicaid Program: Changes in the Latter 1980s," in Wade et al. (1994).

personal income measure and alternatives that better reflect fiscal capacity. The Representative Revenue System (RRS) and Total Taxable Resources (TTR) are state fiscal capacity measures developed specifically for the purpose of capturing states' abilities to raise revenues. Some analysts have suggested that it is not enough to simply measure fiscal capacity and that, instead, a broader indicator should be used in the FMAP formula to capture varying needs for Medicaid financed services across the states. Thus, we also consider two other types of adjustments to the formula: incorporating poverty measures as state-level indicators of need and adjusting both TTR and poverty levels for cost of living differences that exist across states. These last two types of adjustments have larger impacts on changing the FMAP numbers than any of the fiscal capacity adjustments. Our preferred measure is a combination of the TTR and poverty indicators adjusted for cost of living differences. As is discussed in Chapter II, TTR is the simplest way to achieve a more comprehensive measure of fiscal capacity. The poverty measure and the cost of living adjustors add additional information that needs to be incorporated in a truly comprehensive measure. Finally, we consider the impact of changing the lower bound in the FMAP formula. Almost any of the changes offered in the paper would lead to substantial changes in federal payments among the states, creating the potential for both winners and losers. Many of the losing states are exactly those who now spend less than average on their Medicaid programs, meaning that cross-beneficiary inequities might grow over time if some, but not all, of these changes were adopted.

In Chapter III we examine the current distribution of DSH payments and analyze possible alternative policies. Through a series of legislative decisions in the 1980s, the Congress indicated its intent that DSH payments be used to assist hospitals that serve large numbers of low-income patients with special needs. We find that the current distribution of DSH payments is inconsistent with the Congressional intent. The DSH payments are distributed very unevenly among states, largely

dependent on how aggressive states have been in using this mechanism. In eight states, DSH payments amount to more than 20 percent of their Medicaid expenditures, while nine states reported relative DSH payments of less than 1 percent of program expenditures. In this chapter, we propose alternatives such as equalizing DSH payments per uninsured person or per person below 150 percent of poverty. Either approach would have major redistributive effects. States that currently have high levels of disproportionate share payments would be major losers, and there would be substantial increases in most states that currently make little use of this mechanism. We also suggest that a rational distribution of disproportionate share dollars should not be based on the current flawed FMAP but make use of a more sophisticated formula such as that proposed in Chapter II. Simulation results using the FMAP proposed in Chapter II are also presented.

Chapter IV focuses on the interstate equity issues that arise in designing a Medicaid maintenance of effort (MOE) program as a component of a broad based health care reform plan. Basing MOE requirements on current system Medicaid spending (as was the case under the proposals of the 103rd Congress) implies that the distribution of that spending across states is appropriate and should be extended into the foreseeable future. With the available evidence that current spending patterns are not equitable, further attention to alternative mechanisms for distributing state contributions to national reform programs is warranted. This chapter includes the exposition of a number of alternative allocation formulas, and finds that moves to more equitably structured "MOE" requirements could result in large percentage changes in state payments. Although these changes are not large relative to total state revenue, they are likely to require rather lengthy phase-in periods.

All three of these analyses conclude that even simple changes could lead to substantial gains and losses by various states. But while such changes could improve cross-state equity, they would

not resolve many of the other concerns that have been raised about Medicaid. For example, we do not believe that the reform strategies analyzed in this work would make significant strides in decreasing the variance in state spending per beneficiary. These strategies are intended to create a more level financing “playing field” from which states would make their spending/program design choices. Ability to pay is not the only factor entering into these choices; the diverging political realities that exist across states are likely to be at least as important in state level decision making. Differences in state needs can also drive benefit variations. For example, a state with a substantial problem with low birthweight babies might choose to have an extensive pre-natal program that encompasses more beneficiaries than a population that has much greater problems with the long term care needs of the elderly. This latter type of flexibility may constitute a desirable variation in services.

Striking a balance between flexibility for variations in state demographics/health care needs and assuring that differences in political attitudes towards low income persons does not lead to limited access to care is a complex task. It is too complex, in fact, to be the responsibility of a rather simple matching formula. As a result, we assume that significant increases in equity with regard to eligibility and benefits for individuals in different states will come only through further central regulation of eligibility and benefits. Regulations of this type, however, have not been easily forthcoming due to the substantial state budget obligations in many areas, and the original competing goal of state flexibility. Throughout this analysis we note where reform options have the potential for increasing the existing disparities—for instance reforms which would reduce federal contributions to states with relatively modest Medicaid programs today.

Developing and implementing a new mechanism for allocating Medicaid financing burdens will inevitably lead to redistributions. Depending upon whether or not there is a budget neutrality

constraint and the particular adjustments employed, states' positions relative to one another could change dramatically. The ability of states to adapt to these changes and the political capacity to overcome opposition of potential "losing" states then become major issues. These concerns also raise a number of issues regarding how to move over time to a new formula. This issue is raised at the end of this volume in a brief concluding section.

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CHAPTER II: OPTIONS FOR REFORMULATING THE FEDERAL MEDICAL ASSISTANCE PERCENTAGE FORMULA¹

Introduction

The Federal Medical Assistance Percentage (FMAP), the formula used to determine the share of each state's Medicaid expenditures financed by the federal government, has often been criticized as incomplete and inequitable. The measure of state personal income used in the FMAP to calculate the relative standings of states omits factors that many believe should be part of any measure of a state's ability to finance its program. Others claim that concepts such as each state's need for Medicaid services should be taken into consideration. And still other critics argue for variations in the general way the formula is constructed. These discussions are not just of academic interest—in 1995, they will affect how about \$90 billion of federal Medicaid funds are allocated across states.² As the Medicaid program has grown in size relative to state budgets, the potential gains and losses have also risen in importance. Thus, the stakes are very high, and if Medicaid remains a large and growing source of health care coverage for low income Americans, the FMAP formula represents a critical tool for affecting that coverage.

In an earlier paper for the Health Care Financing Administration, we examined the pros and cons of alternative FMAP measures (Blumberg, Holahan, and Moon, 1993). This chapter briefly revisits some of those issues and simulates the potential impact of a wide range of options.

¹ This chapter was written by Marilyn Moon and David Liska.

² Moreover, because of the way the FMAP is designed, states stand to gain substantially from even small increases in their calculated federal share. Consider a simple example. If a state contributes \$10 million toward its Medicaid program out of its own funds, an FMAP of 50 percent will bring in \$10 million in federal dollars (for a total of \$20 million). If the state's FMAP rose to 60 percent, that state could now spend a total of \$25 million while keeping its own contribution level constant. In this example, the 10 percentage point increase in the FMAP would bring in 50 percent more federal dollars in this example.

The Nature of the Problem

Since the FMAP is the mechanism which determines the level of federal dollars directed to each state for their Medicaid program, most of the measure's criticism centers on the level and distribution of federal spending. Essentially, the FMAP is charged with achieving the multiple and sometimes conflicting goals for the Medicaid program. These goals include:

- providing a fair allocation of federal dollars to states according to their fiscal capacities;
- providing a consistent reasonable level of health care protection to certain low-income groups;
- promoting state spending on health care beyond what the federal government alone contributes; and
- allowing state flexibility.

The first goal depends exclusively on the FMAP formula, while the others are more influenced by other factors. For example, state flexibility is assured by an open-ended matching formula, but limited by other program rules.

Perhaps the most problematic goal is the provision of reasonable health protection to low-income groups. Does this imply that the amounts need to be the same (perhaps after adjusting for differences in costs of care) across the states? Is there an acceptable level of variation? What is the appropriate balance between flexibility and states' preferences, and equity for beneficiaries residing in different states? While the matching formula itself cannot assure such a balance, it can play a role in encouraging equity—for example, by providing greater incentives for states with large low-income populations to direct greater relative resources to its Medicaid program. Beneficiary equity can be accomplished more effectively by federal mandates on coverage and eligibility—but at a direct cost on state flexibility.

It is useful to consider a number of elements from the current FMAP formula of:

$$FMAP = \text{federal share} = 1 - \left[\left(\frac{\text{state per capita personal income}}{\text{national per capita personal income}} \right)^2 \cdot 0.45 \right]$$

where $.50 \leq FMAP \leq .83$

Changes in the formula could modify the fiscal capacity (income) measure used, eliminate squaring from the formula (which tends to broaden the distribution of the FMAP), alter the "multiplier" or coefficient of relative income (0.45), and change or eliminate the bounds (which ensure that no state is responsible for more than 50 percent or less than 17 percent of its Medicaid expenditures). Although most of this analysis concentrates on changing the basic measure used to capture fiscal capacity, we address the other components of the formula as well.

However, before calculating alternatives to the current FMAP formula, it is important to consider which of the several possible goals such changes are seeking to achieve. First, should the FMAP merely impose greater financial responsibilities on states with more measurable resources (i.e. fiscal capacity, however defined)? Or should the FMAP serve to redirect funds from states with low relative numbers of people in need to states with larger percentages of uninsured, low-income individuals—i.e., a needs-based approach? Currently, the FMAP explicitly—albeit imperfectly—addresses only the first issue of fiscal capacity. In a sense, a fiscal capacity-only indicator focuses on achieving a better balance across states, while a needs-based indicator also raises issues about balancing the level of benefits for beneficiaries in different states.

Even if relative fiscal capacity is the only concern, strong arguments can be made for revisions in the FMAP using a more accurate fiscal capacity measure. If equalization of expenditures between states (i.e. Medicaid eligibility rules and expenditures per enrollee) are also of

concern, other adjustments to the formula would likely be needed. One additional adjustment could be to incorporate indicators of need—relative state poverty levels.³ for example.

It is unlikely, however, that any formula change alone would equalize expenditures for Medicaid beneficiaries. As shown in Table II.1, the state with the largest Medicaid spending per person under 150 percent of the poverty threshold—Connecticut—also has the lowest possible FMAP. A number of states with FMAPs above 70 percent—Alabama, Idaho, Mississippi, and New Mexico, for example—have among the lowest per capita spending amounts (that is, all are less than \$1200 per person under 150 percent of poverty). Others, such as Louisiana and West Virginia, have higher expenditure levels. Needs adjustments alone will not resolve this issue. Nor can these issues ultimately be settled here, since they also involve value judgments regarding fairness between the states.

Fiscal Capacity

The heart of the current FMAP formula is the definition of relative state fiscal capacity—each state's "ability to pay" or raise revenue. States with more available resources (higher incomes, more natural resources, etc.) could be expected to contribute a greater share towards their Medicaid programs than states with lower capacities. The extent to which a given fiscal capacity measure approximates each state's respective ability to raise revenue is important in this judgment. To assess the usefulness and suitability of a given fiscal capacity measure, one may

³ Because the current Medicaid financing structure offers an open-ended match—that is, the federal government places no limits on how much it will pay—it can be argued that relative need for Medicaid services within a state is implicitly taken into account; states with more individuals to cover can simply spend more while receiving a correspondingly larger federal reimbursement. However, the relatively small programs offered by many states where poverty is highest suggest that the existing formula might not offer enough incentives to expand enrollments or covered services (the correlation coefficient between state poverty rates and expenditures per poor is only 0.56). As a result, the measures we analyze include both capacity-only alternatives and ones that also incorporate the potential need for Medicaid services.

Table II.1

FMAP, MEDICAID SPENDING PER POOR, AND PERCENT POOR
by State, 1993

	(A) 1993 FMAP	Actual		Adjusted for Cost of Living	
		(B) Total Medicaid spending per person under 150% of poverty	(C) Percent of population under 150% of poverty	(D) Total Medicaid spending per person under 150% of poverty	(E) Percent of population under 150% of poverty
All States	57.1	\$1,760	24.0	\$1,756	23.7
Alabama	71.5	\$938	31.1	\$1,019	28.5
Alaska	50.0	\$1,755	25.5	\$1,539	29.1
Arkansas	74.4	\$1,346	31.1	\$1,496	27.6
California	50.0	\$1,346	26.2	\$1,294	27.3
Colorado	54.4	\$1,424	20.1	\$1,468	19.6
Connecticut	50.0	\$4,800	11.8	\$4,248	13.7
Delaware	50.0	\$1,958	17.4	\$1,883	18.3
District of Columbia	50.0	\$3,546	32.8	\$3,314	34.6
Florida	55.0	\$1,295	26.5	\$1,378	24.7
Georgia	62.1	\$1,380	27.6	\$1,516	25.4
Hawaii	50.0	\$1,314	22.2	\$1,019	30.4
Idaho	71.2	\$1,056	25.8	\$1,123	23.9
Illinois	50.0	\$1,724	22.8	\$1,724	22.8
Indiana	63.2	\$2,149	23.0	\$2,262	21.7
Iowa	62.7	\$1,701	20.0	\$1,829	17.3
Kansas	58.2	\$1,348	20.3	\$1,450	18.2
Kentucky	71.7	\$1,522	30.8	\$1,691	26.7
Louisiana	73.7	\$1,757	33.9	\$1,909	31.7
Maine	61.8	\$2,289	23.5	\$2,200	24.8
Maryland	50.0	\$2,219	17.4	\$2,264	17.1
Massachusetts	50.0	\$3,379	17.7	\$2,939	21.0
Michigan	55.8	\$1,788	22.7	\$1,902	21.5
Minnesota	54.9	\$2,353	20.4	\$2,503	19.0
Mississippi	79.0	\$984	39.0	\$1,106	35.0
Missouri	60.3	\$1,170	25.3	\$1,258	23.2
Montana	70.9	\$1,383	27.9	\$1,456	26.1
Nebraska	61.3	\$1,734	19.6	\$1,865	17.3
Nevada	52.3	\$1,240	21.5	\$1,240	21.5
New Hampshire	50.0	\$2,176	15.2	\$2,034	16.3
New Jersey	50.0	\$2,896	15.9	\$2,518	19.2
New Mexico	73.9	\$1,095	32.8	\$1,129	31.8
New York	50.0	\$3,882	24.3	\$3,406	28.3
North Carolina	65.9	\$1,541	24.8	\$1,694	22.5
North Dakota	72.2	\$1,880	22.6	\$2,022	20.5
Ohio	60.3	\$1,993	21.2	\$2,055	20.5
Oklahoma	69.7	\$1,144	28.9	\$1,258	26.1
Oregon	62.4	\$1,370	22.6	\$1,384	22.5
Pennsylvania	55.5	\$1,921	20.2	\$1,830	21.5
Rhode Island	53.6	\$4,267	17.7	\$3,809	21.4
South Carolina	71.3	\$1,237	28.0	\$1,360	25.9
South Dakota	70.3	\$1,428	26.2	\$1,569	22.5
Tennessee	67.6	\$1,553	28.9	\$1,670	26.9
Texas	64.4	\$1,105	29.2	\$1,214	26.1
Utah	75.3	\$1,267	21.0	\$1,267	21.0
Vermont	59.9	\$2,172	18.2	\$2,108	19.6
Virginia	50.0	\$1,343	19.5	\$1,399	18.3
Washington	55.0	\$2,373	17.1	\$2,350	17.4
West Virginia	76.3	\$1,857	32.5	\$2,040	29.2
Wisconsin	60.4	\$2,220	18.8	\$2,362	17.5
Wyoming	67.1	\$1,432	19.7	\$1,507	18.9

Note: Arizona and U.S. territories are not included. Expenditures do not include disproportionate share payments.

apply the following criteria:

- Comprehensiveness: does the measure capture all of the sources of revenue available to a state? Likewise, is it exclusive of non-taxable sources of income?
- Neutrality: is the measure neutral with respect to economic and fiscal choices of the state governments and its residents?
- Discrimination: can the measure delineate the extent of different sources of revenue? (this is important since some bases are more easily taxed than others).

The basic fiscal capacity measures simulated for this part of the analysis are:

- An adjusted measure of the state per capita personal income (PCPI);
- The Representative Revenue System (RRS);
- An adjusted measure of the RRS;
- Total Taxable Resources (TTR).

Each of these alternatives are defined and discussed in more detail below. Results presented in this section focus only on the measures that will go into the FMAP calculation and hence are described in terms of an index, ranking states relative to the national average (where an index value of 100 represents average capacity).⁴ Measured in this manner, lower income states, such as Alabama or Arkansas, would have capacity index rankings less than 100, while states with higher measured capacities, such as Connecticut or New Jersey, would show rankings above 100.

Adjusted Per Capita Personal Income. The current FMAP formula relies upon state personal income data from the Bureau of Economic Analysis (BEA), Regional Economic Measurement Division. The income measure is similar, although not exact, in definition to the National Income and Product Accounts (NIPA). That is, state data do not correspond exactly with the national aggregate numbers. The components of state personal income are listed in Appendix A.

⁴ The PCPI indexes represent personal income data for the years 1988-1990 (average). The RRS and TTR indexes are for 1991. This creates some problems of comparability but was necessary due to data limitations. An additional timing issue arises in general concerning how long the time lag should be between the data and the resulting formula. For example, 1988-1990 data for PCPI are currently used to calculate the FMAP for 1993.

A major problem with using unadjusted per capita personal income (PCPI) as a fiscal capacity measure is its lack of comprehensiveness—included are various sources of nontaxable income, while significant sources of revenue for state treasuries are ignored. For example, PCPI includes Medicaid expenditures and transfer payments to individuals. As a result, states with large Medicaid expenditures or cash assistance populations (AFDC, SSI, and food stamps) would falsely appear to have higher relative fiscal capacities, since these benefits essentially represent double-counting of income.⁵ Moreover, many of them are not subject to income taxation and hence do not contribute to the tax base.

On the other hand, per capita personal income fails to include some significant sources of revenue for state treasuries. Of particular importance, income from corporate income taxes is not included, resulting in a significant distortion for states (like Delaware) with relatively large numbers of incorporated enterprises. Also excluded from PCPI is the concept of tax exportability. States, to some degree, have direct and indirect abilities to tax individuals who are not state residents. This is important because citizens of a particular state are more likely to accept tax increases imposed on those outside the state, hence increasing the ability to raise revenues for state activities. Severance taxes on energy production and the deductibility of state and local income and property taxes from federal tax liabilities are primary examples. Alaska, with its sizable stock of natural resources, receives considerable revenue from its taxation of oil production; Nevada is another example with its taxes on gambling—taxes which clearly fall on non-resident tourists. Therefore, it can be argued that the PCPI may not represent a comprehensive measure of a state or region's specific fiscal capacity.

⁵ As transfer benefits, tax dollars from the incomes of others are used to fund these programs.

In addition to a lack of comprehensiveness, per capita personal income lacks consistent “neutrality.” Included in the measure are expenditures such as AFDC and Medicaid expenditures that directly reflect the fiscal and behavioral choices of state residents and state governments. Ideally, a fiscal capacity measure would be independent of such influences.

We calculate an adjusted PCPI measure that makes several adjustments to correct the PCPI’s inherent problems with comprehensiveness and neutrality:⁶

- Transfer payments paid to individuals are removed;
- Medical vendor payments are removed;
- Payments to non-profit institutions are removed;
- Post-federal tax, non-dividend corporate income is added to the measure;
- Personal income is adjusted to compensate for the deductibility of state and local income taxes from federal tax liabilities;
- Personal income is adjusted to include state revenue from severance taxes.

The indices that result from using adjusted and unadjusted PCPI measures are shown in Table II.2. These adjustments are displayed in two separate steps to demonstrate the importance of tax exportation adjustments. Thus, column B includes all adjustments except tax exportation, and column D indicates its marginal impact. The effects of various income inclusions and exclusions are relatively small, leading to only modest changes between the first two indices. The largest (although small in the absolute) impacts of these adjustments occur for Delaware due to the inclusion of corporate income.

When taking the effects of tax exportation into account, the results are more dramatic. The states with the largest changes are Alaska, Nevada, New Mexico, and Wyoming—all of which show increased fiscal capacity. With the exception of Nevada (which receives considerable income from

⁶ For the calculation of the adjusted PCPI measure, we started with the same data used by the Administration for Children and Families, which was officially responsible for the calculation of the 1993 FMAP.

Table II.2

FISCAL CAPACITY INDICES BY STATE

Per Capita Income (PCPI), 1988-90 Average

100=National Average

	(A) Unadjusted	(B) Adjusted for income inclusions / exclusions	(C) Difference between adjusted for income inclusions/exclusions & unadjusted index [(B)-(A)]	(D) Adjusted for income inclusions / exclusions and tax exportation	(E) Difference between adjusted for income inclusions/exclusions and tax exportation & unadjusted index [(D)-(A)]
Total	100.0	100.0	-	100.0	-
Alabama	79.6	79.0	(0.6)	77.8	(1.8)
Alaska	114.9	115.6	0.6	372.6	257.6
Arkansas	75.4	74.1	(1.3)	71.8	(3.6)
California	111.5	111.2	(0.3)	109.9	(1.5)
Colorado	100.6	101.8	1.2	100.1	(0.6)
Connecticut	137.5	139.6	2.1	136.7	(0.7)
Delaware	107.9	110.7	2.8	110.8	2.8
District of Columbia	124.7	123.4	(1.3)	122.2	(2.5)
Florida	100.0	102.1	2.2	97.8	(2.2)
Georgia	91.8	91.9	0.1	89.2	(2.6)
Hawaii	105.7	106.7	1.1	103.5	(2.2)
Idaho	80.0	80.4	0.4	77.6	(2.4)
Illinois	108.8	109.4	0.6	105.7	(3.1)
Indiana	90.4	90.1	(0.4)	85.8	(4.7)
Iowa	91.0	90.7	(0.3)	86.8	(4.2)
Kansas	96.4	96.9	0.5	98.9	2.5
Kentucky	79.3	78.7	(0.6)	85.0	5.7
Louisiana	76.4	75.1	(1.4)	87.3	10.9
Maine	92.1	91.7	(0.4)	87.8	(4.4)
Maryland	117.0	117.8	0.8	119.1	2.0
Massachusetts	122.6	121.7	(1.0)	119.5	(3.1)
Michigan	99.1	98.3	(0.7)	97.5	(1.6)
Minnesota	100.1	99.9	(0.2)	98.1	(2.0)
Mississippi	68.3	66.9	(1.4)	66.4	(1.9)
Missouri	94.0	94.3	0.3	90.7	(3.3)
Montana	80.4	80.7	0.3	97.2	16.8
Nebraska	92.7	92.9	0.2	89.1	(3.6)
Nevada	103.0	104.9	1.9	149.1	46.1
New Hampshire	114.4	116.7	2.3	113.1	(1.4)
New Jersey	133.6	135.0	1.4	133.1	(0.4)
New Mexico	76.2	76.3	0.1	102.7	26.5
New York	117.6	115.8	(1.7)	115.4	(2.2)
North Carolina	87.0	87.4	0.4	84.8	(2.2)
North Dakota	78.6	76.7	(1.9)	93.5	14.9
Ohio	94.0	93.6	(0.3)	90.4	(3.6)
Oklahoma	82.1	81.2	(0.9)	98.2	16.1
Oregon	91.4	91.8	0.4	92.9	1.5
Pennsylvania	99.5	98.8	(0.7)	95.3	(4.2)
Rhode Island	101.5	100.3	(1.2)	97.4	(4.1)
South Carolina	79.9	79.9	(0.0)	77.0	(2.9)
South Dakota	81.3	80.7	(0.6)	77.8	(3.5)
Tennessee	84.9	84.0	(0.9)	79.1	(5.8)
Texas	88.9	89.4	0.5	95.2	6.3
Utah	74.1	74.2	0.1	75.1	1.0
Vermont	94.4	95.6	1.2	91.8	(2.6)
Virginia	106.0	107.5	1.5	106.3	0.3
Washington	100.0	100.6	0.6	97.4	(2.6)
West Virginia	72.6	71.5	(1.1)	80.4	7.8
Wisconsin	93.8	93.3	(0.5)	91.8	(1.9)
Wyoming	85.5	87.0	1.5	167.6	82.1

Note: Arizona and U.S. territories are not included.

gambling activities), these are states with large natural resources that are neglected in the unadjusted PCPI measure.

But these adjustments require a number of strong assumptions and can become quite complicated.⁷ Even with adjustments, per capita personal income still has several remaining flaws. Since it is just an “income” measure, it does not include all factors that constitute fiscal capacity. Furthermore, per capita personal income does not differentiate between different tax bases and their inherent taxability (discrimination criterion). States with equivalent per capita personal incomes, but with different distributions between the tax bases, can have broadly different capabilities to raise tax revenue. Personal income, for example, is taxed at different rates than corporate income. Consequently, we turn to a number of other possible measures.

Representative Revenue System. To address problems with the PCPI, the Advisory Commission for Intergovernmental Relations (ACIR) developed the concept of the Representative Tax System (RTS), later expanded to the Representative Revenue System (RRS). These measures of fiscal capacity are broader in scope than simple per capita personal income; they assume a tax system where each state taxes its available tax bases at standard rates (i.e. the same rate in each state for a given tax base) and thus capture each state’s potential revenue raising ability. The RRS is essentially identical to the RTS (see Appendix Table II.B) with the exception that it includes non-tax sources of state revenue such as state lotteries, user fees, and rents and royalties from state-owned enterprises.

⁷ These include explicit estimation of the percentage of severance tax revenues paid by non-state residents. For all states, it was assumed that 75 percent of the severance tax revenues received by state governments was financed by out-of-state residents. While the percentage allocated is arbitrary, not making any adjustment for severance tax revenue is equivalent to assuming that 0 percent was paid by non-residents. Since severance taxes have the greatest impact on the income measure adjustments, the assumed percentage of exported taxes is a critical assumption.

The RRS has clear conceptual advantages over the per capita personal income measure. Since it includes other revenue bases in addition to personal income, it is more reflective of a state's revenue raising abilities—including severance taxes which were so influential to the adjusted PCPI measure (a full list of the tax bases included in the RRS are shown in Appendix Table II.B). Further, the RRS is more discriminating since it allows for varying degrees of taxability between the different tax bases. Each state's fiscal capacity is assessed based on its specific population and resources under an average, standardized tax system. This significantly, although not completely, ameliorates the problems with discrimination of tax bases in the determination of fiscal capacity while avoiding the effects of states' choices regarding taxation. States are judged on their potential to raise revenue and not on actual effort or decisions of whether to levy a particular tax.

Estimates for the RRS based on 1991 figures are shown in column B of Table II.3. Compared to the unadjusted per capita personal income measure, the RRS increases the fiscal capacities considerably for Alaska, Hawaii, Nevada, and Wyoming. For Alaska and Wyoming the increase can be attributed to the inclusion of severance taxes in the calculation (as was the case with the adjusted PCPI measure). The increase for Hawaii arises because of the importance of tourism in the economy affecting its sales tax base, and to a lesser extent because of the property tax component reflects Hawaii's high property values. Nevada is strongly affected by revenue from taxes on gambling activities. New York exhibited the largest decline in relative fiscal capacity as compared to the PCPI. New Jersey and Rhode Island also experienced considerable declines.

While conceptually preferable to the PCPI, the RRS has some serious shortcomings in capturing fiscal capacity. In practice, it is difficult to fully avoid reflecting behavioral responses of

Table II.3

FISCAL CAPACITY INDICES BY STATE

Representative Revenue System (RRS), 1991

100=National Average

	(A) Unadjusted per capita income (PCPI)	RRS			
		(B) Unadjusted	(C) Diff. between unadj. RRS and PCI [(B)-(A)]	(D) Adjusted ²	(E) Diff. between adj. RRS and PCPI [(D)-(A)]
Total	100.0	100.0	-	100.0	-
Alabama	79.6	81.6	1.9	78.3	(1.3)
Alaska	114.9	240.4	125.5	290.3	175.4
Arkansas	75.4	77.6	2.2	72.6	(2.8)
California	111.5	112.9	1.4	114.6	3.1
Colorado	100.6	107.5	6.8	105.9	5.2
Connecticut	137.5	130.4	(7.0)	137.9	0.4
Delaware	107.9	120.2	12.3	117.3	9.4
District of Columbia	124.7	123.8	(0.9)	129.1	4.4
Florida	100.0	102.6	2.6	100.0	0.1
Georgia	91.8	90.6	(1.2)	87.5	(4.3)
Hawaii	105.7	137.1	31.4	130.1	24.4
Idaho	80.0	81.8	1.8	79.4	(0.6)
Illinois	108.8	103.2	(5.6)	105.7	(3.2)
Indiana	90.4	89.4	(1.0)	86.5	(3.9)
Iowa	91.0	92.2	1.2	89.8	(1.2)
Kansas	96.4	92.2	(4.2)	91.3	(5.1)
Kentucky	79.3	82.5	3.2	79.9	0.6
Louisiana	76.4	88.9	12.5	86.1	9.6
Maine	92.1	94.4	2.3	89.9	(2.2)
Maryland	117.0	108.1	(8.9)	112.1	(4.9)
Massachusetts	122.6	119.0	(3.6)	121.2	(1.5)
Michigan	99.1	95.2	(3.9)	95.1	(4.0)
Minnesota	100.1	99.1	(1.0)	97.1	(3.0)
Mississippi	68.3	68.9	0.6	67.0	(1.3)
Missouri	94.0	90.5	(3.5)	88.6	(5.3)
Montana	80.4	88.8	8.4	85.0	4.6
Nebraska	92.7	94.1	1.4	93.2	0.5
Nevada	103.0	122.5	19.5	104.8	1.8
New Hampshire	114.4	110.5	(3.9)	108.1	(6.3)
New Jersey	133.6	122.0	(11.6)	128.5	(5.1)
New Mexico	76.2	90.2	14.0	86.5	10.2
New York	117.6	104.8	(12.8)	110.8	(6.7)
North Carolina	87.0	91.6	4.6	89.5	2.5
North Dakota	78.6	89.9	11.3	86.8	8.2
Ohio	94.0	93.4	(0.6)	92.4	(1.6)
Oklahoma	82.1	85.3	3.2	82.8	0.7
Oregon	91.4	97.3	5.9	92.7	1.3
Pennsylvania	99.5	96.9	(2.5)	98.7	(0.7)
Rhode Island	101.5	90.8	(10.7)	93.3	(8.2)
South Carolina	79.9	82.9	3.0	78.9	(1.0)
South Dakota	81.3	85.4	4.1	81.6	0.3
Tennessee	84.9	83.8	(1.1)	81.6	(3.3)
Texas	88.9	96.0	7.1	93.2	4.3
Utah	74.1	80.3	6.2	77.8	3.7
Vermont	94.4	102.2	7.7	97.3	2.8
Virginia	106.0	102.9	(3.2)	104.0	(2.1)
Washington	100.0	106.4	6.5	107.1	7.1
West Virginia	72.6	75.9	3.3	74.1	1.6
Wisconsin	93.8	90.4	(3.4)	89.1	(4.6)
Wyoming	85.5	127.7	42.3	125.3	39.9

Note: Arizona and U.S. territories are not included.

² Adjusted by replacing the general sales, selective sales, licenses, and residential property tax bases with personal income. Severance tax base was replaced with actual severance tax revenue.

states (violating the neutrality criterion) and other factors that influence capacity.⁸ The treatment of severance taxes also creates problems. A representative rate for severance taxes does not account for varying market and competitive conditions that exist within and across states. Strong arguments have been made that severance taxes should be treated independently, since the current level of severance taxes (not the hypothetical amount yielded by the RRS) is more reflective of the political and economic realities facing state administrators and legislatures.

To account for some of these disadvantages, we adjusted the RRS measure by respecifying several of the tax bases. The general sales, selective sales, licenses, and residential property tax bases were replaced with personal income.⁹ In addition, we replaced the hypothetical severance tax revenue with the actual amount collected.

After making adjustments to the RRS's tax bases (shown in Table II.3), Alaska, Hawaii, and Wyoming still show large increases. In fact, Alaska's index rises substantially, indicating its strong reliance on severance taxes. The capacity index for Nevada drops sharply from a value of 122.5 (unadjusted) to 104.8 (adjusted). This is due to the fact that by replacing the consumption tax bases with state personal income, the contribution to potential tax revenues by non-residents is sharply

⁸ The RRS violates the neutrality criterion by including consumption tax bases in the calculation. An ideal measure of fiscal capacity would be independent of the fiscal choices of state residents and state governments. By including these tax bases in the RRS, the measure penalizes states with large levels of consumer-based activity. Comprehensiveness also becomes an issue when considering the inclusion of the market value of property in the calculation of the representative rate for property taxes; the existence of high real estate values (Hawaii and California for example) does not directly translate into higher fiscal capacity. For a thorough analysis of fiscal capacity and the PCPI, RTS, and RRS indices, the reader is referred to *Improved Measures of State Fiscal Capacity: Short-Term Changes in the PCPI and RTS Indices* by Stephen M. Barro. The theoretical discussions of fiscal capacity presented here rely heavily on the work by Barro.

⁹ Note that only the revenue bases, and not the total tax receipts, were replaced for each of these bases. For example, the representative tax rate for residential property was calculated as the total receipts for residential property taxes divided by total personal income. This was done to correct for situations where high property values—when not well correlated with personal income—have the potential to lower effective fiscal capacity by crowding out other tax bases. When making this adjustment, we did not use the adjusted personal income figure which was discussed in the last section, since it would have little overall impact here.

diminished. This may also affect states that rely heavily on tourism. An ideal set of adjustments, however, would include the contribution by non-state residents, but omit the state resident portion

The RRS, however, is still mainly a measure of “potential” and not actual fiscal capacity. The measure explicitly assumes a standardized tax system across all states; by doing so, it does not accurately reflect the varying economic situations between states and regions that influence their ability to tap into various revenue sources. Similarly, the RRS makes a further assumption that each tax base is fully independent and may be taxed without consideration of the effects on other bases or the base itself (i.e. assuming that increasing a sales tax would have no effect on aggregate sales).

Total Taxable Resources. Our final measure of fiscal capacity is a compromise developed by the Department of the Treasury: Total Taxable Resources (TTR). In essence, TTR is a hybrid measure of state personal income and gross state product (GSP), and reflects some of the conceptual foundations found in both the PCPI and the RRS measures.

GSP includes the income of corporations and energy producing activities not captured in the state personal income measure. Furthermore, since TTR includes income produced within a state but received by out-of-state residents, it captures some inter-state flows (and hence higher fiscal capacity) that state personal income does not. Thus, by incorporating both personal income and GSP, the TTR captures not only sources of income received by state residents, but income produced within the state and received by non-residents. The components of GSP are shown in Appendix Table II.C.

In terms of comprehensiveness, TTR falls somewhere in between the PCPI and RRS measures. While it does not discriminate between tax bases in the same manner as the RRS, TTR more accurately reflects the “base” from which states can draw tax revenue. The RRS produces only a

“hypothetical” tax yield that ignores the effects of taxes on the bases themselves, the interaction between tax bases, and the political and economic realities facing each state.¹⁰

A recent report from the General Accounting Office (GAO, 1993) recommended replacing PCPI with TTR as the measure of fiscal capacity used in the Federal Medical Assistance Percentage. TTR does have clear comprehensive and conceptual advantages over PCPI. Moreover, the TTR, while similar in comprehensiveness, lacks the complexity of the ACIR’s RRS. As a result of its relative comprehensiveness and simplicity, we will focus on the Total Taxable Resources concept as the leading alternative measure of fiscal capacity for the remainder of this analysis.

A comparison of the fiscal capacity measures discussed in this paper are shown in Table II.4. On the average, TTR falls somewhere between the PCPI and RRS measures. The states with substantial increases from the TTR index as compared to the unadjusted PCPI differ from the states that increased under the RRS, with the exception of Alaska, Hawaii, and Wyoming. In addition, Louisiana and the District of Columbia also display a substantial increase under the TTR measure.¹¹ Florida and New Hampshire have declines in their index values.

¹⁰ The RRS makes the best attempt to discriminate between the different tax bases by calculating a different tax rate for each. While an improvement over the current approach, this creates new problems; the “representative rates” used by the RRS can be influenced by larger states or states where certain economic activity is focused, violating neutrality. The large gambling tax base in Nevada and the severance tax base in Alaska are prime examples.

¹¹ The District of Columbia constitutes a unique case. By adding GSP to the TTR index, D.C. appears to have a very large increase in fiscal capacity. In practice, however, since it is not a state, it does not have the ability to tax services produced in D.C. but reported as income elsewhere. Thus, its actual fiscal capacity is substantially less than that indicated by the TTR.

Table II.4

FISCAL CAPACITY INDICES BY STATE

Per Capita Income (PCI), 1988-90 Average

Representative Revenue System (RRS), 1991

Total Taxable Resources per Capita (TTR), 1991

100=National Average

	PCI		RRS		TTR	(F) Diff. b/w TTR & Unadj. PCPI [(E)-(A)]
	(A)	(B)	(C)	(D)	(E)	
	Unadjusted	Adjusted ¹	Unadjusted	Adjusted ²	Unadjusted	
Total	100.0	100.0	100.0	100.0	100.0	-
Alabama	79.6	77.8	81.6	78.3	79.6	(0.1)
Alaska	114.9	372.6	240.4	290.3	178.5	63.6
Arkansas	75.4	71.8	77.6	72.6	74.0	(1.4)
California	111.5	109.9	112.9	114.6	109.4	(2.1)
Colorado	100.6	100.1	107.5	105.9	101.6	0.9
Connecticut	137.5	136.7	130.4	137.9	134.3	(3.2)
Delaware	107.9	110.8	120.2	117.3	116.5	8.5
District of Columbia	124.7	122.2	123.8	129.1	225.5	100.8
Florida	100.0	97.8	102.6	100.0	90.0	(10.0)
Georgia	91.8	89.2	90.6	87.5	96.0	4.2
Hawaii	105.7	103.5	137.1	130.1	112.9	7.2
Idaho	80.0	77.6	81.8	79.4	80.0	(0.0)
Illinois	108.8	105.7	103.2	105.7	105.2	(3.6)
Indiana	90.4	85.8	89.4	86.5	91.7	1.3
Iowa	91.0	86.8	92.2	89.8	89.8	(1.2)
Kansas	96.4	98.9	92.2	91.3	92.8	(3.6)
Kentucky	79.3	85.0	82.5	79.9	84.6	5.2
Louisiana	76.4	87.3	88.9	86.1	90.2	13.7
Maine	92.1 ¹	87.8	94.4	89.9	86.6	(5.5)
Maryland	117.0	119.1	108.1	112.1	110.9	(6.1)
Massachusetts	122.6	119.5	119.0	121.2	121.3	(1.3)
Michigan	99.1	97.5	95.2	95.1	96.1	(3.0)
Minnesota	100.1	98.1	99.1	97.1	103.2	3.1
Mississippi	68.3	66.4	68.9	67.0	67.4	(0.8)
Missouri	94.0	90.7	90.5	88.6	93.7	(0.3)
Montana	80.4	97.2	88.8	85.0	77.1	(3.3)
Nebraska	92.7	89.1	94.1	93.2	93.1	0.4
Nevada	103.0	149.1	122.5	104.8	108.7	5.7
New Hampshire	114.4	113.1	110.5	108.1	102.9	(11.5)
New Jersey	133.6	133.1	122.0	128.5	127.7	(5.9)
New Mexico	76.2	102.7	90.2	86.5	78.5	2.3
New York	117.6	115.4	104.8	110.8	119.4	1.9
North Carolina	87.0	84.8	91.6	89.5	94.3	7.3
North Dakota	78.6	93.5	89.9	86.8	86.0	7.4
Ohio	94.0	90.4	93.4	92.4	92.4	(1.6)
Oklahoma	82.1	98.2	85.3	82.8	81.2	(0.9)
Oregon	91.4	92.9	97.3	92.7	87.5	(4.0)
Pennsylvania	99.5	95.3	96.9	98.7	95.4	(4.0)
Rhode Island	101.5	97.4	90.8	93.3	102.5	1.0
South Carolina	79.9	77.0	82.9	78.9	82.0	2.1
South Dakota	81.3	77.8	85.4	81.6	85.0	3.7
Tennessee	84.9	79.1	83.8	81.6	87.5	2.6
Texas	88.9	95.2	96.0	93.2	95.5	6.6
Utah	74.1	75.1	80.3	77.8	78.8	4.7
Vermont	94.4	91.8	102.2	97.3	88.1	(6.3)
Virginia	106.0	106.3	102.9	104.0	105.1	(0.9)
Washington	100.0	97.4	106.4	107.1	102.4	2.4
West Virginia	72.6	80.4	75.9	74.1	74.3	1.7
Wisconsin	93.8	91.8	90.4	89.1	93.6	(0.2)
Wyoming	85.5	167.6	127.7	125.3	106.5	21.0

Note: Arizona and U.S. territories are not included.

¹ Adjusted for: transfer payments (AFDC & SSI—state portion only)(-), non-dividend corporate income (+), medical vendor payments (-), payments to non-profit institutions (-), deductibility of state and local income taxes (+/-), state severance tax revenue (+).² Adjusted by replacing the general sales, selective sales, licenses, and residential property tax bases with personal income. Severance tax base was replaced with actual severance tax revenue.

Adding Other Dimensions to the Measure

Additional adjustments of the FMAP to reflect needs of the population and to control for differences in the cost of living are critical additional factors that might be added, either alone or in combination with other factors. While this moves away from a pure fiscal capacity measure, such a change could be justified if one of the goals is to assure a more balanced treatment of low-income populations in varying states. Fiscal capacity adjustments alone do not capture all the crucial differences. Thus, a range of additional adjustments to the current formulation are considered in this section:

- Indices based on the number of low-income persons;
- Poverty indices calculated after adjusting income for state-level cost of living differences;
- Combined TTR/poverty measures; and
- Combined TTR/poverty measures adjusted for state-level cost of living differences.

Poverty as a Measure of Need. States with equal per capita personal incomes or even equal measured fiscal capacities may actually have different proportions of low income populations. In such cases, states may not have equal abilities to provide Medicaid benefits per person in need. Their equal fiscal capacities may need to finance services to differing numbers of Medicaid beneficiaries.

To represent the need for Medicaid services in each state (in the same manner as fiscal capacity), we selected income cutoffs of 100 and 150 percent of the federal poverty thresholds. The lower bound is a traditional indicator; alternatively, 150 percent of poverty captures most of those eligible for Medicaid. In the case of persons age 65 and over (one of our subgroups), the medically needy often have incomes over 100 percent of poverty. Including all persons below a certain poverty standard will also capture differences in fiscal capacity. Since incomes of very low income individuals are often not subject to taxation, high rates of poverty in a state, all other things equal, lower fiscal

capacity. States with high poverty rates and high incomes, such as the District of Columbia, are those where income is distributed unequally.

In addition to all persons below these poverty thresholds, we create separate indices for persons above and below age 65. Note that in order to have an index number below 100 indicate need for greater federal assistance, states with the highest rates of poverty have the lowest index values. There are some important differences across the various poverty indices as shown in Table II.5. The index is reasonably consistent for the overall population regardless of whether the definition of low income is based on 100 or 150 percent of poverty. The five states with the lowest indices include the District of Columbia, Kentucky, Louisiana, Mississippi, New Mexico, and West Virginia. States with high index values—and hence low rates of overall poverty—include Connecticut, Delaware, New Hampshire, and New Jersey. The rankings of these states are very similar regardless of the exact cutoff level. A few states do show some larger differences. For example, Utah has few very poor individuals, but the index falls at 150 percent of poverty.

Larger differences arise if the state populations are subdivided into over- and under-65 groups. A number of states have higher rates of poverty for the young than the old. This is particularly true, for example, of Alaska, California, Connecticut, Maine, and Wyoming. States with much larger rates of poverty for the elderly than younger persons include Indiana, Maryland, New Hampshire, New Jersey, and Virginia. Furthermore, the differences increase when the measure is 150 percent of poverty.

Which poverty measure is more appropriate? As mentioned above, while Medicaid does not cover all those below 100 percent of poverty, eligibility for some of the categorical groups captures

Table II.5

FISCAL CAPACITY INDICES BY STATE

Total Taxable Resources (TTR), 1991

Number of Individuals Below 150% of Poverty

(Above 100=below average poverty), 1991

100=National Average

	(A) Unadjusted TTR per capita	Poverty Level									(J) Diff. b/w 150% & 100% [(I)-(E)]
		Under 100%				Under 150%					
		(B) < 65	(C) 65+	(D) Diff. b/w 65+ & <65 [(C)-(B)]	(E) Total	(F) < 65	(G) 65+	(H) Diff. b/w 65+ & <65 [(G)-(F)]	(I) Total		
Total	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	-	
Alabama	79.6	81.9	55.6	-26.3	77.9	79.2	67.3	(11.9)	77.3	(0.6)	
Alaska	178.5	97.2	154.9	57.7	98.3	90.9	127.7	36.8	94.2	(4.1)	
Arkansas	74.0	83.9	53.4	-30.5	78.5	79.7	68.0	(11.6)	77.2	(1.2)	
California	109.4	91.7	195.9	104.2	96.4	88.3	120.8	32.5	91.8	(4.6)	
Colorado	101.6	121.8	153.0	31.1	124.3	117.9	131.4	13.5	119.9	(4.4)	
Connecticut	134.3	195.7	262.9	67.1	202.1	198.6	244.8	46.2	204.3	2.2	
Delaware	116.5	177.6	194.4	16.8	178.9	137.5	137.2	(0.2)	137.9	(41.0)	
District of Columbia	225.5	69.5	66.7	-2.7	69.1	71.8	82.8	11.0	73.3	4.2	
Florida	90.0	86.5	107.5	21.0	89.7	87.9	111.0	23.1	90.8	1.1	
Georgia	96.0	88.2	64.5	-23.6	84.9	88.8	76.1	(12.7)	86.9	2.1	
Hawaii	112.9	111.6	101.6	-10.0	110.4	108.0	108.5	0.5	108.3	(2.1)	
Idaho	80.0	97.5	104.8	7.2	98.1	93.0	93.9	0.9	93.3	(4.8)	
Illinois	105.2	95.9	109.1	13.2	97.1	104.8	108.0	3.1	105.4	8.2	
Indiana	91.7	120.0	80.6	-39.4	113.9	107.9	88.2	(19.8)	104.6	(9.3)	
Iowa	89.8	133.8	131.3	-2.5	133.7	123.0	108.0	(15.1)	120.0	(13.7)	
Kansas	92.8	126.8	146.6	19.9	128.7	119.0	115.0	(4.0)	118.5	(10.2)	
Kentucky	84.6	80.6	59.4	-21.2	77.4	80.4	68.6	(11.8)	78.2	0.8	
Louisiana	90.2	63.2	61.1	-2.0	62.9	71.4	67.0	(4.4)	70.9	8.1	
Maine	86.6	106.0	186.6	80.7	110.9	98.8	127.2	28.4	102.1	(8.8)	
Maryland	110.9	129.5	94.9	-34.5	124.8	139.9	125.4	(14.5)	138.2	13.4	
Massachusetts	121.3	134.6	172.6	38.0	138.5	142.6	109.4	(33.2)	135.5	(2.9)	
Michigan	96.1	92.0	135.9	43.9	95.2	103.7	118.6	14.8	105.7	10.6	
Minnesota	103.2	119.4	108.2	-11.2	118.0	120.6	101.6	(19.1)	117.6	(0.4)	
Mississippi	67.4	61.9	45.0	-16.9	59.6	62.0	58.4	(3.7)	61.6	2.1	
Missouri	93.7	98.7	75.7	-23.0	95.7	96.5	84.6	(12.0)	94.9	(0.8)	
Montana	77.1	92.9	131.3	38.4	95.9	83.5	105.4	21.9	86.2	(9.8)	
Nebraska	93.1	139.4	105.3	-34.1	134.6	129.4	93.8	(35.6)	122.7	(11.9)	
Nevada	108.7	118.6	104.4	-14.2	116.8	109.9	125.4	15.5	112.1	(4.8)	
New Hampshire	102.9	192.0	120.9	-71.0	181.8	168.3	109.3	(59.0)	158.7	(23.1)	
New Jersey	127.7	149.8	106.6	-43.1	143.1	161.3	115.3	(46.1)	151.6	8.5	
New Mexico	78.5	67.9	70.4	2.5	68.0	71.6	84.2	12.6	73.3	5.2	
New York	119.4	95.6	89.9	-5.7	95.0	99.6	97.5	(2.2)	99.1	4.1	
North Carolina	94.3	101.8	68.9	-32.8	96.5	101.9	77.7	(24.1)	97.1	0.6	
North Dakota	86.0	109.6	93.4	-16.2	107.5	108.4	97.3	(11.1)	106.4	(1.0)	
Ohio	92.4	115.4	124.4	8.9	116.4	114.4	108.3	(6.1)	113.4	(3.0)	
Oklahoma	81.2	89.5	73.0	-16.5	87.2	83.0	84.4	1.4	83.1	(4.1)	
Oregon	87.5	120.8	114.2	-6.6	120.1	107.6	102.6	(5.1)	106.5	(13.6)	
Pennsylvania	95.4	126.5	123.8	-2.8	126.6	122.7	108.9	(13.8)	119.0	(7.6)	
Rhode Island	102.5	128.1	164.9	36.8	132.7	140.5	123.3	(17.2)	135.9	3.3	
South Carolina	82.0	86.8	64.9	-21.9	84.0	86.8	77.0	(9.9)	85.9	1.9	
South Dakota	85.0	98.3	105.9	7.6	99.5	92.9	89.6	(3.3)	91.8	(7.6)	
Tennessee	87.5	83.7	74.7	-9.0	82.6	83.7	81.7	(2.0)	83.3	0.7	
Texas	95.5	82.2	69.0	-13.3	80.6	81.7	83.4	1.7	82.3	1.7	
Utah	78.8	137.8	179.9	42.1	139.7	110.7	146.2	35.4	114.6	(25.1)	
Vermont	88.1	138.8	120.8	-18.0	136.5	134.2	119.2	(15.1)	131.9	(4.6)	
Virginia	105.1	128.9	91.0	-37.9	124.4	128.2	88.2	(40.0)	123.3	(1.1)	
Washington	102.4	139.0	134.7	-4.3	138.4	139.3	143.5	4.2	140.2	1.8	
West Virginia	74.3	75.1	94.0	18.9	77.4	72.9	82.6	9.7	73.9	(3.5)	
Wisconsin	93.6	138.0	136.9	-1.1	138.0	130.3	116.3	(14.0)	127.5	(10.5)	
Wyoming	106.5	138.1	214.6	76.5	142.3	121.1	122.3	1.2	121.9	(20.5)	

Note: Arizona and U.S. territories are not included.

people above 150 percent of poverty. Nonetheless, we focus most of our attention on the 150 percent measure for all persons. In several examples below, however, we also create indices for the over- and under-65 populations to understand the impacts on FMAPs if Medicaid were to be subdivided, for example, by separating the financing for long term care and other services for the elderly from financing for services to other beneficiaries.

Poverty level determinations, however, are based on national threshold measures and hence fail to adjust for the differences in the cost of living that exist between states. It is likely that a poverty threshold relevant for New York would be too high for a state like Mississippi. The costs of housing, food and other necessities are certainly much lower in Mississippi, so a national threshold indicator is likely to overstate the amount of poverty found there and, correspondingly, to understate the prevalence of poverty in high cost of living states. Consequently, it is reasonable to adjust the measure for the share of persons below 150 percent of poverty using a cost of living adjuster to modify the poverty level thresholds, by state, before calculating the number of persons classified as poor. This issue is addressed below.

Cost of Living Adjustments. One of the most salient shortfalls of the current FMAP formulation is the lack of adjustment for regional differences in costs of living. For example, while states such as Massachusetts and Hawaii have similar fiscal capacities (as measured by unadjusted TTR), the actual fiscal capacity for Hawaii is lower when its high costs of living are taken into account—purchasing the same types of goods and services costs more in Hawaii. Similar issues arise with regard to poverty rate measures, as mentioned previously.

Unfortunately, statistics on state-level cost of living are not currently generated by any official agency. A number of efforts have been made in the past, most of which are based on the Bureau of

Labor Statistics (BLS) Family Budgets methodology (BLS, 1982). The BLS published metropolitan-based statistics on costs of living designed to be representative of the traditional four-person family. This data series was discontinued in 1981 as a result of budgetary cutbacks, but has been updated using the Consumer Price Index (Leonard and Friar, 1994). These estimated state cost of living indices are shown in Table II.6.

The cost of living adjuster can be applied both to fiscal capacity measures and to the poverty calculation, although the adjustments take somewhat different forms. In the case of the TTR measure, the cost of living indicator is used to adjust the TTR figure after it has been initially calculated. States with high costs of living, such as Alaska and New York, are adjusted downward and states with low costs of living have their TTR's raised. The results, as shown in Table II.7, are for a narrowing of the index numbers since high cost of living states tend to have higher initial TTR measures and vice versa. For example, the TTR falls most dramatically for Alaska, Connecticut, the District of Columbia, Hawaii, Massachusetts, New Jersey, and New York—locations where TTR was well above average initially. And some of the lowest unadjusted TTR states see their indices rise substantially, including Georgia, Kentucky, North Carolina, and Texas.

To adjust the poverty rates, we used the cost of living indices to recalculate the poverty thresholds and then estimated the number of people in each state who fell below these new thresholds. Thus, in Iowa, for example, with its lower cost of living, the thresholds are set lower and fewer persons are categorized as falling below 150 percent of poverty. The opposite adjustment occurs for high cost of living states such as Hawaii, where poverty should effectively rise because it is more expensive to live at a subsistence level. The resulting index changes considerably and in a predictable direction. Midwestern and southern states shift from having much greater than average rates of

Table II.6

STATE COST OF LIVING INDICES
100=National Average

State	1992 Cost of living index
All States	100
Alabama	92
Alaska	114
Arkansas	90
California	104
Colorado	97
Connecticut	113
Delaware	104
District of Columbia	107
Florida	94
Georgia	91
Hawaii	129
Idaho	94
Illinois	100
Indiana	95
Iowa	93
Kansas	93
Kentucky	90
Louisiana	92
Maine	104
Maryland	98
Massachusetts	115
Michigan	94
Minnesota	94
Mississippi	89
Missouri	93
Montana	95
Nebraska	93
Nevada	100
New Hampshire	107
New Jersey	115
New Mexico	97
New York	114
North Carolina	91
North Dakota	93
Ohio	97
Oklahoma	91
Oregon	99
Pennsylvania	105
Rhode Island	112
South Carolina	91
South Dakota	91
Tennessee	93
Texas	91
Utah	100
Vermont	103
Virginia	96
Washington	101
West Virginia	91
Wisconsin	94
Wyoming	95

*Note: Arizona and U.S. territories
are not included.*

Source: Leonard and Friar, 1994

Table II.7

POVERTY and TTR INDICES BY STATE, ADJUSTED FOR COST OF LIVING

Number of Individuals Below 150% of Poverty

(Above 100=below average poverty), 1991

Total Taxable Resources (TTR), 1991

100=National Average

	Poverty Level									(J) Difference b/w Unadj. Under 150% & Adj. Under 150% [(I)-(H)]
	TTR		Under 100%			Under 150%			(I) Actual Under 150%	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H) or (I) (adjusted)		
	Actual (unadjusted)	Adjusted	< 65	65+	Total	< 65	65+	Total		
All States	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	
Alabama	79.6	86.5	87.3	62.9	83.9	84.5	76.1	83.3	77.3 (6.0)	
Alaska	178.5	156.6	78.7	88.9	78.5	79.1	99.4	81.5	94.2 12.7	
Arkansas	74.0	82.3	95.5	67.2	91.0	89.1	73.3	85.8	77.2 (8.5)	
California	109.4	105.2	86.6	171.2	90.7	83.5	112.7	86.7	91.8 5.1	
Colorado	101.6	104.7	127.2	159.1	129.7	118.8	137.1	121.2	119.9 (1.4)	
Connecticut	134.3	118.8	156.2	193.9	160.0	173.7	173.9	173.3	204.3 30.9	
Delaware	116.5	112.0	164.1	167.2	164.1	128.8	129.2	129.3	137.9 8.6	
District of Columbia	225.5	210.7	63.1	57.4	62.4	66.8	79.3	68.4	73.3 4.9	
Florida	90.0	95.7	91.2	119.5	95.2	92.7	119.2	96.0	90.8 (5.2)	
Georgia	96.0	105.5	91.5	75.2	89.5	95.1	83.2	93.5	86.9 (6.5)	
Hawaii	112.9	87.5	78.2	58.0	75.5	77.4	80.1	77.9	108.3 30.4	
Idaho	80.0	85.1	102.7	113.1	103.6	97.6	107.5	99.1	93.3 (5.8)	
Illinois	105.2	105.2	94.7	106.2	95.7	103.4	106.3	103.9	105.4 1.4	
Indiana	91.7	96.6	127.8	93.0	122.8	112.2	95.2	109.5	104.6 (4.9)	
Iowa	89.8	96.6	151.1	163.1	152.7	139.0	127.8	136.7	120.0 (16.7)	
Kansas	92.8	99.8	136.9	194.3	141.4	129.5	136.2	130.5	118.5 (12.0)	
Kentucky	84.6	93.9	93.2	75.5	90.8	89.7	85.6	88.9	78.2 (10.7)	
Louisiana	90.2	98.0	66.2	64.5	66.0	75.0	72.7	74.9	70.9 (4.0)	
Maine	86.6	83.3	100.6	167.2	104.9	93.2	113.4	95.7	102.1 6.4	
Maryland	110.9	113.2	130.9	95.3	126.1	141.1	123.5	138.8	138.2 (0.7)	
Massachusetts	121.3	105.5	114.7	86.9	110.6	120.6	85.6	112.8	135.5 22.7	
Michigan	96.1	102.2	97.0	154.5	100.9	107.0	132.1	110.0	105.7 (4.3)	
Minnesota	103.2	109.8	124.2	126.9	124.4	129.0	105.1	125.1	117.6 (7.5)	
Mississippi	67.4	75.8	68.1	53.4	66.2	68.2	64.1	67.7	61.6 (6.1)	
Missouri	93.7	100.8	105.3	89.6	103.3	104.0	91.1	102.2	94.9 (7.4)	
Montana	77.1	81.2	95.4	150.2	99.2	87.4	120.4	91.0	86.2 (4.8)	
Nebraska	93.1	100.1	144.8	122.8	142.0	145.3	102.0	137.0	122.7 (14.3)	
Nevada	108.7	108.7	117.1	101.6	115.2	108.4	123.5	110.5	112.1 1.5	
New Hampshire	102.9	96.2	170.1	99.9	159.5	155.8	95.4	145.3	158.7 13.4	
New Jersey	127.7	111.0	131.9	78.2	122.3	131.7	93.0	123.5	151.6 28.2	
New Mexico	78.5	80.9	71.0	75.5	71.3	72.4	89.1	74.5	73.3 (1.2)	
New York	119.4	104.8	80.5	65.0	78.4	85.1	78.4	83.8	99.1 15.3	
North Carolina	94.3	103.7	112.7	80.5	107.9	109.9	85.6	105.2	97.1 (8.1)	
North Dakota	86.0	92.5	113.1	102.6	111.9	116.3	114.6	115.9	106.4 (9.5)	
Ohio	92.4	95.2	116.5	126.9	117.6	116.8	110.3	115.7	113.4 (2.4)	
Oklahoma	81.2	89.3	98.8	99.7	99.0	90.9	92.6	91.0	83.1 (7.9)	
Oregon	87.5	88.3	120.0	111.2	119.0	106.2	101.8	105.2	106.5 1.3	
Pennsylvania	95.4	90.9	115.8	106.1	114.7	114.0	99.4	110.1	119.0 8.8	
Rhode Island	102.5	91.5	116.7	120.0	117.5	115.9	94.9	110.5	135.9 25.4	
South Carolina	82.0	90.2	94.8	69.7	91.6	92.4	83.9	91.7	85.9 (5.8)	
South Dakota	85.0	93.4	111.6	121.3	113.0	105.0	109.4	105.2	91.8 (13.3)	
Tennessee	87.5	94.0	86.3	84.5	86.2	88.0	88.5	88.0	83.3 (4.7)	
Texas	95.5	105.0	90.5	80.1	89.2	90.2	91.5	90.8	82.3 (8.5)	
Utah	78.8	78.8	136.0	175.2	137.7	109.2	144.0	113.0	114.6 1.6	
Vermont	88.1	85.6	133.4	102.1	129.1	122.8	109.3	120.7	131.9 11.2	
Virginia	105.1	109.5	135.5	113.4	133.0	134.5	93.4	129.5	123.3 (6.2)	
Washington	102.4	101.4	134.4	120.9	132.8	135.1	139.5	136.0	140.2 4.2	
West Virginia	74.3	81.6	80.7	103.9	83.5	78.4	101.4	81.2	73.9 (7.2)	
Wisconsin	93.6	99.6	153.8	196.6	158.0	137.4	127.3	135.3	127.5 (7.8)	
Wyoming	106.5	112.1	151.4	208.9	154.8	124.1	127.9	125.2	121.9 (3.3)	

Note: Arizona and U.S. territories are not included.

poverty to being closer to the national average. States that move away from the national average to reflect higher adjusted levels of poverty are Alaska, Connecticut, Hawaii, Massachusetts, New Jersey (for the elderly only), New Hampshire, New York, and Rhode Island. In most cases, the changes are consistent across all the poverty indices.

Combination Alternatives. The final alternative we simulated is a combination of the TTR and the poverty thresholds both with and without a cost of living adjustment. The General Accounting Office (1993) has recommended such a combination, although in their proposal, the poverty adjustment was set at 100 percent of the poverty threshold and included no cost of living adjustments. For purposes of our analysis, we use three different poverty indices, all using 150 percent of poverty as the threshold, but dividing the population into two subgroups as well as using the overall measure. The basic formula for each of the combined options can be expressed as follows:

$$\left(\frac{\text{state TTR}}{\text{state population under 150\% of poverty}} \div \frac{\text{national total TTR}}{\text{national population under 150\% of poverty}} \cdot 100 \right)$$

States with a high TTR and lower than average poverty result in an index number that is higher for the combined measure than for either the TTR or poverty indices taken separately. As shown in Table II.8, the index from using the combination of these two basic measures (not adjusted for cost of living) yields results that are quite different from the TTR-only, the poverty-index only, or the unadjusted PCPI index. The largest declines (relative to PCPI) in Table II.8 are seen for Alabama, Arkansas, Florida, Mississippi, New Mexico, and West Virginia. Alaska, Connecticut, Delaware, New Hampshire, and New Jersey exhibited the largest increases. Few states are left unaffected by this combination measure in terms of changes in the index numbers.

Table II.8

TTR INDICES BY STATE, ADJUSTED FOR COST OF LIVING

100=National Average

	TTR / Poverty Combination							
	(A) Per capita income (PCPI) (unadjusted)	(B) TTR (unadjusted)	(C) Population below 150% of poverty (unadjusted)	(D) (unadjusted)	(E) Difference b/w unadj. Pov/TRR comb. & unadj. PCPI [(D)-(A)]	(F) Poverty adjusted for COL	(G) Poverty and TTR adjusted for COL	(H) Difference b/w adj. Pov/TRR for COL & unadj. PCPI [(G)-(A)]
All States	100.0	100.0	100.0	100.0	-	100.0	100.0	-
Alabama	79.6	79.6	77.3	61.5	(18.2)	66.2	72.0	(7.7)
Alaska	114.9	178.5	94.2	168.2	53.3	145.5	127.6	12.7
Arkansas	75.4	74.0	77.2	57.2	(18.2)	63.5	70.5	(4.9)
California	111.5	109.4	91.8	100.3	(11.1)	94.8	91.2	(20.3)
Colorado	100.6	101.6	119.9	121.8	21.1	123.2	127.0	26.3
Connecticut	137.5	134.3	204.3	274.2	136.8	232.7	205.9	68.5
Delaware	107.9	116.5	137.9	160.6	52.7	150.6	144.8	36.9
District of Columbia	124.7	225.5	73.3	165.3	40.6	154.3	144.2	19.5
Florida	100.0	90.0	90.8	81.7	(18.3)	86.4	91.9	(8.1)
Georgia	91.8	96.0	86.9	83.4	(8.4)	89.7	98.6	6.8
Hawaii	105.7	112.9	108.3	122.2	16.6	87.9	68.2	(37.5)
Idaho	80.0	80.0	93.3	74.6	(5.4)	79.2	84.3	4.3
Illinois	108.8	105.2	105.4	110.8	2.0	109.3	109.3	0.5
Indiana	90.4	91.7	104.6	96.0	5.5	100.4	105.7	15.3
Iowa	91.0	89.8	120.0	107.7	16.7	122.7	132.0	41.0
Kansas	96.4	92.8	118.5	110.0	13.6	121.1	130.2	33.9
Kentucky	79.3	84.6	78.2	66.1	(13.2)	75.2	83.5	4.2
Louisiana	76.4	90.2	70.9	64.0	(12.5)	67.5	73.4	(3.0)
Maine	92.1	86.6	102.1	88.4	(3.7)	82.9	79.7	(12.4)
Maryland	117.0	110.9	138.2	153.3	36.3	154.0	157.2	40.2
Massachusetts	122.6	121.3	135.5	164.5	41.8	136.9	119.0	(3.6)
Michigan	99.1	96.1	105.7	101.6	2.6	105.8	112.5	13.5
Minnesota	100.1	103.2	117.6	121.4	21.3	129.1	137.3	37.3
Mississippi	68.3	67.4	61.6	41.6	(26.7)	45.7	51.3	(17.0)
Missouri	94.0	93.7	94.9	88.9	(5.1)	95.8	103.0	9.0
Montana	80.4	77.1	86.2	66.5	(13.9)	70.2	73.9	(6.5)
Nebraska	92.7	93.1	122.7	114.2	21.5	127.5	137.1	44.4
Nevada	103.0	108.7	112.1	121.8	18.9	120.2	120.2	17.2
New Hampshire	114.4	102.9	158.7	163.3	48.9	149.5	139.7	25.3
New Jersey	133.6	127.7	151.6	193.6	60.1	157.7	137.1	3.5
New Mexico	76.2	78.5	73.3	57.5	(18.7)	58.5	60.3	(15.9)
New York	117.6	119.4	99.1	118.4	0.8	100.1	87.8	(29.7)
North Carolina	87.0	94.3	97.1	91.6	4.5	99.2	109.0	22.0
North Dakota	78.6	86.0	106.4	91.6	13.0	99.7	107.2	28.6
Ohio	94.0	92.4	113.4	104.7	10.7	106.9	110.2	16.2
Oklahoma	82.1	81.2	83.1	67.5	(14.6)	73.9	81.2	(0.9)
Oregon	91.4	87.5	106.5	93.2	1.8	92.0	92.9	1.5
Pennsylvania	99.5	95.4	119.0	113.5	14.0	105.1	100.1	0.6
Rhode Island	101.5	102.5	135.9	139.4	37.9	113.3	101.2	(0.3)
South Carolina	79.9	82.0	85.9	70.4	(9.5)	75.2	82.7	2.8
South Dakota	81.3	85.0	91.8	78.0	(3.2)	89.4	98.2	16.9
Tennessee	84.9	87.5	83.3	72.9	(12.0)	77.0	82.7	(2.1)
Texas	88.9	95.5	82.3	78.7	(10.2)	86.8	95.4	6.5
Utah	74.1	78.8	114.6	90.3	16.2	89.1	89.1	15.0
Vermont	94.4	88.1	131.9	116.3	21.9	106.4	103.3	8.9
Virginia	106.0	105.1	123.3	129.6	23.5	136.1	141.8	35.7
Washington	100.0	102.4	140.2	143.5	43.6	139.2	137.8	37.9
West Virginia	72.6	74.3	73.9	54.9	(17.7)	60.3	66.2	(6.3)
Wisconsin	93.8	93.6	127.5	119.4	25.6	126.7	134.8	41.0
Wyoming	85.5	106.5	121.9	129.8	44.3	133.3	140.3	54.8

Note: Arizona and U.S. territories are not included.

The final set of numbers in Table II.8 reflect an index that combines the TTR and the poverty measure to capture both fiscal capacity, need, and cost of living differences between states. It is interesting that most states' indices are higher than when using the unadjusted PCPI. Wyoming goes from 85.5 to 140.3. Changes are also striking for the southern and midwestern states. For example, Maryland rises from an index number of 117 to 157.2 and Nebraska goes from 92.7 to 137.1. These two states move up consistently as compared to both the unadjusted combination measure and the unadjusted PCPI. But some states have their losses and gains mitigated by the cost of living adjustments. That is, the unadjusted combination measure shifts in one direction as compared to the unadjusted PCPI, but the change is reduced when cost of living adjustments are added. For example, Mississippi's index drops from 68.3 to 41.6 between the unadjusted PCPI (the current FMAP measure) and the unadjusted combination; when cost of living differences are taken into account, the index rises again to 51.3.

Overall, the biggest "winners"—in terms of a reduced index (higher FMAP)—are California, Hawaii, Maine, Mississippi, New Mexico, and New York. Hawaii demonstrates the largest percentage change with the index number falling from 105.7 to 68.2. Its high relative cost of living and high COL-adjusted poverty rates offset its greater than average fiscal capacity. A number of midwestern and western states would receive lower federal contributions using this adjusted combination measure, however.

The addition of poverty to fiscal capacity index strengthens the measure from a "needs based" approach. It is important to note that the Medicaid program covers a wide range of populations and services—i.e. that "need" can mean different things to different states. States, for example, that have greater numbers of poor elderly—and therefore have a greater use of expensive long term care—would be at a disadvantage compared to other states with similar *overall* poverty rates.

For these reasons, it has been suggested that the FMAP should be calculated separately for long term and acute care services. Using the COL-adjusted, TTR/poverty measure, Table II.9 shows the impact on the fiscal capacity indices when based on different poverty populations. The second column shows the TTR/poverty index based on the number of nonelderly poor (150% of poverty), while the third column shows the same for the elderly. The final "weighted" column averages the two values based on how intensely the state uses acute care vs. long term care; this approach assumes acute care is spent primarily on the nonelderly and that the elderly are responsible for the bulk of long term care spending.

Almost every state would change following this adjustment. Notable examples are Minnesota, Nebraska, New Hampshire, New Jersey, and Virginia where the resulting fiscal capacity indices drop by more than 10 points (resulting in a higher calculated FMAP). These states are those where there are large differences in the poverty rates between the elderly and the nonelderly. Since they have disproportionately high rates of poor elderly, they are likely to have greater financial responsibilities due to the high costs associated with long term care for the elderly.

Translating Indices into FMAPs

To translate the indices into FMAPs for each state requires several additional steps. First, we begin with the current formula. In the case of the combination option of TTR and poverty, squaring is not used. This is because there are effectively two measures interacting, which is equivalent to squaring a single measure.¹² A comparison across the resulting FMAPs indicates how the various measures would alter the federal shares assuming no changes in other parts of the formula.

¹² It has been suggested that the fiscal capacity index in the current FMAP formula is squared to effectively increase the FMAPs for low-income, higher poverty states. Since the TTR/poverty combination index addresses this directly, the index is not squared.

Table II.9

TTR INDICES BY STATE, ADJUSTED FOR COST OF LIVING
100=National Average

	TTR / Poverty Combination				(E) Difference b/w weighted state & TTR/Pov. Comb. [(D)-(A)]
	(A)	(B)	(C)	(D)	
	Poverty by Age		Elderly	Weighted State Services	
	All	Non- Elderly			
All States	100.0	100.0	100.0	100.0	-
Alabama	72.0	73.1	65.8	69.8	(2.2)
Alaska	127.6	123.8	155.7	131.9	4.3
Arkansas	70.5	73.3	60.3	67.0	(3.6)
California	91.2	87.8	118.6	95.2	4.0
Colorado	127.0	124.4	143.5	132.4	5.4
Connecticut	205.9	206.4	206.6	206.5	0.6
Delaware	144.8	144.2	144.7	144.4	(0.3)
District of Columbia	144.2	140.8	167.0	151.8	7.6
Florida	91.9	88.7	114.1	97.5	5.6
Georgia	98.6	100.3	87.8	96.1	(2.4)
Hawaii	68.2	67.7	70.1	68.6	0.5
Idaho	84.3	83.0	91.5	86.8	2.5
Illinois	109.3	108.8	111.8	110.0	0.7
Indiana	105.7	108.4	92.0	101.9	(3.9)
Iowa	132.0	134.2	123.4	128.6	(3.3)
Kansas	130.2	129.3	136.0	132.9	2.7
Kentucky	83.5	84.3	80.4	83.0	(0.5)
Louisiana	73.4	73.5	71.2	72.6	(0.8)
Maine	79.7	77.6	94.5	86.5	6.8
Maryland	157.2	159.7	139.8	152.9	(4.3)
Massachusetts	119.0	127.3	90.3	109.8	(9.2)
Michigan	112.5	109.4	135.1	119.7	7.2
Minnesota	137.3	141.6	115.4	125.3	(12.0)
Mississippi	51.3	51.7	48.6	50.5	(0.8)
Missouri	103.0	104.8	91.8	98.4	(4.6)
Montana	73.9	70.9	97.8	84.5	10.6
Nebraska	137.1	145.4	102.1	123.5	(13.6)
Nevada	120.2	117.9	134.3	124.0	3.8
New Hampshire	139.7	149.9	91.7	113.8	(26.0)
New Jersey	137.1	146.2	103.3	126.1	(11.0)
New Mexico	60.3	58.6	72.1	63.4	3.1
New York	87.8	89.2	82.1	85.5	(2.4)
North Carolina	109.0	114.0	88.7	102.3	(6.7)
North Dakota	107.2	107.6	106.0	106.6	(0.6)
Ohio	110.2	111.3	105.0	108.3	(1.9)
Oklahoma	81.2	81.1	82.7	81.9	0.6
Oregon	92.9	93.8	90.0	92.0	(1.0)
Pennsylvania	100.1	103.6	90.4	96.3	(3.8)
Rhode Island	101.2	106.0	86.9	95.2	(6.0)
South Carolina	82.7	83.3	75.7	80.2	(2.4)
South Dakota	98.2	98.0	102.1	100.3	2.0
Tennessee	82.7	82.8	83.3	82.9	0.2
Texas	95.4	94.7	96.1	95.2	(0.2)
Utah	89.1	86.1	113.5	95.8	6.7
Vermont	103.3	105.1	93.5	99.4	(4.0)
Virginia	141.8	147.3	102.2	127.8	(13.9)
Washington	137.8	136.9	141.4	139.0	1.1
West Virginia	66.2	64.0	82.8	70.1	3.8
Wisconsin	134.8	136.8	126.7	131.2	(3.5)
Wyoming	140.3	139.1	143.4	141.0	0.7

Note: Arizona and U.S. territories are not included.

To understand the importance of the squaring of the fiscal capacity (or needs) measure and of the bounds on the resulting formula, consider Table II.10. This presents results of what the current FMAP would look like if there were no squaring and/or no bounds placed on the formula.

Squaring the formula spreads out the distribution as shown by a comparison between the second and third columns of Table II.10. The most important impacts are felt by the states with low per capita personal incomes (i.e., high FMAPs) relative to the national average. Such states have considerably higher FMAPs when the terms are squared. For those with incomes near the national average (that is, FMAPs of about 55), squaring makes little difference. And states with higher than average per capita personal incomes are protected by the lower bound of 50 percent. In the absence of bounds, squaring would lower those states' FMAPs. Thus, squaring the terms is used as a means for raising the FMAP for very low income states. For example, it raises Mississippi's FMAP from 69.3 (no squaring) to 79; Utah's FMAP rises from 66.7 to 75.3; and West Virginia goes from 67.3 to 76.3.

In practice, only the lower bound is a meaningful constraint for the measures used here. At present, no state reaches the upper bound of 83 percent: Mississippi is the closest at 79.0. But without the 50 percent minimum, a large number of states would have substantially lower FMAPs. In the case of the current FMAP, the lowest state would be Connecticut at 15 percent. If the FMAP lower bound was set to 45, all 13 states would receive substantially lower federal payments, but nine states would still be protected by the lower bound. Since these states include New York, California, New Jersey, and Massachusetts, the impact on the federal budget could be substantial. This lower bound adjustment is also critical for the other measures. The adjusted TTR/poverty combination measure is

Table II.10

**FEDERAL MEDICAL ASSISTANCE
PERCENTAGES (FMAP), 1993**

	(A) 1993 FMAP	(B) Without Limits	(C) Without Squaring Term	(D) Diff. b/w FMAP w/o sq. term & w/o limits [(C)-(B)]
Alabama	71.5	71.5	64.2	(7.3)
Alaska	50.0	40.6	48.3	7.7
Arkansas	74.4	74.4	66.1	(8.3)
California	50.0	44.1	49.8	5.8
Colorado	54.4	54.4	54.7	0.3
Connecticut	50.0	15.0	38.1	23.2
Delaware	50.0	47.6	51.4	3.8
District of Columbia	50.0	30.1	43.9	13.8
Florida	55.0	55.0	55.0	(0.0)
Georgia	62.1	62.1	58.7	(3.4)
Hawaii	50.0	49.8	52.5	2.7
Idaho	71.2	71.2	64.0	(7.2)
Illinois	50.0	46.7	51.0	4.3
Indiana	63.2	63.2	59.3	(3.9)
Iowa	62.7	62.7	59.1	(3.7)
Kansas	58.2	58.2	56.6	(1.6)
Kentucky	71.7	71.7	64.3	(7.4)
Louisiana	73.7	73.7	65.6	(8.1)
Maine	61.8	61.8	58.5	(3.3)
Maryland	50.0	38.4	47.3	9.0
Massachusetts	50.0	32.3	44.8	12.5
Michigan	55.8	55.8	55.4	(0.4)
Minnesota	54.9	54.9	55.0	0.0
Mississippi	79.0	79.0	69.3	(9.7)
Missouri	60.3	60.3	57.7	(2.5)
Montana	70.9	70.9	63.8	(7.1)
Nebraska	61.3	61.3	58.3	(3.0)
Nevada	52.3	52.3	53.7	1.4
New Hampshire	50.0	41.1	48.5	7.4
New Jersey	50.0	19.7	39.9	20.2
New Mexico	73.9	73.9	65.7	(8.2)
New York	50.0	37.8	47.1	9.3
North Carolina	65.9	65.9	60.8	(5.1)
North Dakota	72.2	72.2	64.6	(7.6)
Ohio	60.3	60.3	57.7	(2.5)
Oklahoma	69.7	69.7	63.1	(6.6)
Oregon	62.4	62.4	58.9	(3.5)
Pennsylvania	55.5	55.5	55.2	(0.2)
Rhode Island	53.6	53.6	54.3	0.7
South Carolina	71.3	71.3	64.0	(7.2)
South Dakota	70.3	70.3	63.4	(6.8)
Tennessee	67.6	67.6	61.8	(5.8)
Texas	64.4	64.4	60.0	(4.4)
Utah	75.3	75.3	66.7	(8.6)
Vermont	59.9	59.9	57.5	(2.4)
Virginia	50.0	49.4	52.3	2.9
Washington	55.0	55.0	55.0	(0.0)
West Virginia	76.3	76.3	67.3	(9.0)
Wisconsin	60.4	60.4	57.8	(2.6)
Wyoming	67.1	67.1	61.5	(5.6)

Note: Arizona and U.S. territories are not included.

shown in Table II.11 both with and without limits. In this case, 19 states have their shares raised because of the lower bound, including 9 of the 13 states which are also above the lower bound under the unadjusted PCPI formula. Moreover, 12 states would have FMAPs of less than 40 percent without the limit and hence would be aided if an even lower limit were adopted. But it is also interesting to note that California and New York are both above 50 using this alternative.

Table II.12 presents the FMAPs for six of the measures described above, the original FMAP, the adjusted and unadjusted TTR, the adjusted poverty measure, and the adjusted and unadjusted TTR/poverty/COL combination measures. These FMAPs result in state rankings very similar to those found in the indices. Differences arise in the spread of the percentage shares at the top of the distribution (because of the squaring in the formula) and a compression at the bottom (due to the lower bound). The only winners from the adjusted TTR/poverty combination would be Hawaii, California, New York, Florida, Maine, and—by one percentage point—Illinois and Rhode Island.

Nonetheless, a number of states would experience substantial declines (of more than 5 percentage points) if we moved to this new formula. These include Arkansas, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Missouri, Nebraska, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming. North Dakota's decline is the greatest, falling 20.5 percentage points to 51.8 percent. These are largely states from the midwest and south and correspond closely to the changes suggested by comparisons using the index only.

Table II.12 also is interesting in demonstrating how each of various measures would change the outlook for particular states. For example, by any of the alternative measures shown in Table II.12,

Table II.11

1993 FEDERAL MEDICAL ASSISTANCE PERCENTAGES (FMAP)

Per Capita Income (PCPI), 1988-90 Average

Total Taxable Resources (TTR), 1991

0.45 multiplier, 50% and 83% limits

	TTR / Poverty Combination Adjusted for COL		(C) State Rankings
	(A)	(B)	
	With Limits	Without Limits	
Alabama	68	68	6
Alaska	50	43	37
Arkansas	68	68	5
California	59	59	18
Colorado	50	43	36
Connecticut	50	7	51
Delaware	50	35	49
District of Columbia	50	35	48
Florida	59	59	19
Georgia	56	56	23
Hawaii	69	69	4
Idaho	62	62	14
Illinois	51	51	31
Indiana	52	52	28
Iowa	50	41	39
Kansas	50	41	38
Kentucky	62	62	13
Louisiana	67	67	7
Maine	64	64	9
Maryland	50	29	50
Massachusetts	50	46	34
Michigan	50	49	33
Minnesota	50	38	43
Mississippi	77	77	1
Missouri	54	54	26
Montana	67	67	8
Nebraska	50	38	42
Nevada	50	46	35
New Hampshire	50	37	45
New Jersey	50	38	41
New Mexico	73	73	2
New York	60	60	16
North Carolina	51	51	30
North Dakota	52	52	29
Ohio	50	50	32
Oklahoma	63	63	10
Oregon	58	58	20
Pennsylvania	55	55	24
Rhode Island	54	54	25
South Carolina	63	63	11
South Dakota	56	56	22
Tennessee	63	63	12
Texas	57	57	21
Utah	60	60	17
Vermont	54	54	27
Virginia	50	36	47
Washington	50	38	44
West Virginia	70	70	3
Wisconsin	50	39	40
Wyoming	50	37	46

Note: Arizona and U.S. territories are not included.

Table II.12

1993 FEDERAL MEDICAL ASSISTANCE PERCENTAGES (FMAP)

Alternative Fiscal Capacity Measures

0.45 multiplier, 50% and 83% limits

	(A) Unadjusted per capita income (PCPI)	TTR		(D) Population below 150% of poverty adjusted for COL	TTR / Poverty Combination		(G) Diff. b/w TTR/Pov. adjusted for COL & unadjusted PCPI [(F)-(A)]
		(B) Unadjusted	(C) Adjusted for COL		(E) Unadjusted	(F) Adjusted for COL	
Alabama	71.5	71.5	66.4	68.8	72.3	67.6	(3.9)
Alaska	50.0	50.0	50.0	70.1	50.0	50.0	-
Arkansas	74.4	75.3	69.5	66.9	74.3	68.3	(6.2)
California	50.0	50.0	50.2	66.2	54.8	59.0	9.0
Colorado	54.4	53.6	50.6	50.0	50.0	50.0	(4.4)
Connecticut	50.0	50.0	50.0	50.0	50.0	50.0	-
Delaware	50.0	50.0	50.0	50.0	50.0	50.0	-
District of Columbia	50.0	50.0	50.0	78.9	50.0	50.0	-
Florida	55.0	63.6	58.8	58.6	63.2	58.7	3.6
Georgia	62.1	58.6	50.0	60.7	62.5	55.6	(6.4)
Hawaii	50.0	50.0	65.5	72.7	50.0	69.3	19.3
Idaho	71.2	71.2	67.4	55.8	66.4	62.1	(9.1)
Illinois	50.0	50.2	50.2	51.4	50.1	50.8	0.8
Indiana	63.2	62.1	58.0	50.0	56.8	52.4	(10.8)
Iowa	62.7	63.7	58.0	50.0	51.5	50.0	(12.7)
Kansas	58.2	61.2	55.2	50.0	50.5	50.0	(8.2)
Kentucky	71.7	67.8	60.3	64.4	70.3	62.4	(9.3)
Louisiana	73.7	63.4	56.8	74.8	71.2	67.0	(6.7)
Maine	61.8	66.3	68.8	58.8	60.2	64.1	2.3
Maryland	50.0	50.0	50.0	50.0	50.0	50.0	-
Massachusetts	50.0	50.0	50.0	50.0	50.0	50.0	-
Michigan	55.8	58.4	53.0	50.0	54.3	50.0	(5.8)
Minnesota	54.9	52.1	50.0	50.0	50.0	50.0	(4.9)
Mississippi	79.0	79.5	74.2	79.4	81.3	76.9	(2.1)
Missouri	60.3	60.5	54.3	53.0	60.0	53.6	(6.6)
Montana	70.9	73.2	70.3	62.7	70.1	66.7	(4.2)
Nebraska	61.3	61.0	54.9	50.0	50.0	50.0	(11.3)
Nevada	52.3	50.0	50.0	50.0	50.0	50.0	(2.3)
New Hampshire	50.0	52.3	58.4	50.0	50.0	50.0	-
New Jersey	50.0	50.0	50.0	50.0	50.0	50.0	-
New Mexico	73.9	72.3	70.5	75.0	74.1	72.9	(1.0)
New York	50.0	50.0	50.6	68.4	50.0	60.5	10.5
North Carolina	65.9	60.0	51.6	50.2	58.8	50.9	(15.0)
North Dakota	72.2	66.7	61.5	50.0	58.8	51.8	(20.5)
Ohio	60.3	61.6	59.2	50.0	52.9	50.4	(9.8)
Oklahoma	69.7	70.3	64.1	62.7	69.6	63.4	(6.2)
Oregon	62.4	65.6	64.9	50.2	58.1	58.2	(4.2)
Pennsylvania	55.5	59.0	62.8	50.0	50.0	55.0	(0.5)
Rhode Island	53.6	52.7	62.3	50.0	50.0	54.5	0.8
South Carolina	71.3	69.7	63.4	62.2	68.3	62.8	(8.5)
South Dakota	70.3	67.5	60.8	50.2	64.9	55.8	(14.5)
Tennessee	67.6	65.6	60.2	65.2	67.2	62.8	(4.8)
Texas	64.4	58.9	50.4	62.9	64.6	57.1	(7.4)
Utah	75.3	72.0	72.0	50.0	59.3	59.9	(15.4)
Vermont	59.9	65.0	67.0	50.0	50.0	53.5	(6.4)
Virginia	50.0	50.3	50.0	50.0	50.0	50.0	-
Washington	55.0	52.8	53.8	50.0	50.0	50.0	(5.0)
West Virginia	76.3	75.2	70.0	70.4	75.3	70.2	(6.1)
Wisconsin	60.4	60.6	55.4	50.0	50.0	50.0	(10.4)
Wyoming	67.1	50.0	50.0	50.0	50.0	50.0	(17.1)

Wyoming would be a major and consistent loser. Smaller, but still consistent losses would occur for Colorado, Indiana, Kentucky, Minnesota, Nebraska, Nevada, North Carolina, North Dakota, South Carolina, South Dakota, Tennessee, Utah, Washington, and West Virginia. Only Florida and Illinois (by a very small amount) would have a higher FMAP in each of the examples shown in Table II.12. A small group of states would improve at least in two cases and stay at the same percentage in others (usually the 50 percent lower limit); these states are California, Hawaii, and New York.

As described above, even relatively small changes in the FMAP can result in large increases or decreases in the federal contribution to each state. To illustrate this, several of our adjusted measures are shown in Table II.13. We assume that, at least initially, state contributions remain constant—even though in practice states would likely increase their own levels of effort. Using that assumption, the aggregate federal contribution falls only modestly when adjustments are made to the fiscal capacity or needs measure. For example, in our "preferred" alternative of the TTR/poverty combination adjusted for COL, expenditures go down by only 1.7 percent. But the magnitudes of gains and losses by state are very high. Hawaii would gain the most, experiencing a 126 percent increase in federal payments. This is essentially a result of the cost of living adjustment since in the other two formulations, Hawaii's FMAP would remain unchanged. The biggest losers would be North Dakota, Utah, and Wyoming, each experiencing more than a 50 percent decline. All these states would lose under the other measures as well.

If the lower bound on the COL-adjusted TTR/poverty FMAP was lowered to 45 percent (as shown in the last column of Table II.13), an additional 13 states would lose federal dollars. Without a change in the lower limit, nine of these states would not lose federal dollars. That is, they are protected by the lower bound. But the others previously had FMAPs above 50 percent, so they would

Table II.13

1993 FEDERAL MEDICAID SPENDING (MILLIONS OF DOLLARS)

Based on Alternative FMAP Formulas, and Total Taxable Resources (TTR), 1991

Holding State Expenditures Constant

0.45 multiplier

	Current formula: unadjusted per capita income (PCPI)	Unadjusted TTR		TTR / Poverty Combination		TTR / Poverty Combination adjusted for COL ¹		TTR / Poverty Combination adjusted for COL ¹ (lower limit set to 0.45%)		
		Expend. (millions)	Percent change in expend.	Expend. (millions)	Percent change in expend.	Expend. (millions)	Percent change in expend.	Expend. (millions)	Change (millions)	Percent change in expend.
Total	71,508	70,384	-1.6%	69,024	-3.5%	70,320	-1.7%	68,025	-3,483	-4.9%
Alabama	1,170	1,174	0.3%	1,222	4.4%	975	-16.6%	975	-195	-16.6%
Alaska	134	134	n/c	134	n/c	134	n/c	110	-24	-18.2%
Arkansas	767	806	5.0%	761	-0.8%	567	-26.1%	567	-200	-26.1%
California	6,769	6,769	n/c	8,221	21.5%	9,733	43.8%	9,733	2,964	43.8%
Colorado	594	574	-3.4%	498	-16.2%	498	-16.2%	407	-187	-31.5%
Connecticut	1,139	1,139	n/c	1,139	n/c	1,139	n/c	932	-207	-18.2%
Delaware	126	126	n/c	126	n/c	126	n/c	103	-23	-18.2%
District of Columbia	343	343	n/c	343	n/c	343	n/c	281	-62	-18.2%
Florida	2,723	3,883	42.6%	3,830	40.6%	3,158	16.0%	3,158	435	16.0%
Georgia	1,737	1,500	-13.7%	1,765	1.6%	1,332	-23.4%	1,332	-406	-23.4%
Hawaii	190	190	n/c	190	n/c	430	126.0%	430	240	126.0%
Idaho	209	209	0.1%	167	-20.0%	138	-33.8%	138	-71	-33.8%
Illinois	2,491	2,512	0.8%	2,504	0.5%	2,573	3.3%	2,573	83	3.3%
Indiana	1,780	1,699	-4.5%	1,363	-23.4%	1,142	-35.8%	1,142	-638	-35.8%
Iowa	619	646	4.3%	391	-36.9%	368	-40.6%	301	-318	-51.4%
Kansas	518	588	13.5%	380	-26.6%	372	-28.1%	304	-213	-41.2%
Kentucky	1,336	1,112	-16.8%	1,246	-6.7%	876	-34.4%	876	-460	-34.4%
Louisiana	2,749	1,701	-38.1%	2,427	-11.7%	1,989	-27.7%	1,989	-761	-27.7%
Maine	526	638	21.3%	492	-6.5%	581	10.5%	581	55	10.5%
Maryland	980	980	n/c	980	n/c	980	n/c	802	-178	-18.2%
Massachusetts	2,022	2,022	n/c	2,022	n/c	2,022	n/c	1,753	-269	-13.3%
Michigan	2,436	2,708	11.2%	2,286	-6.2%	1,926	-20.9%	1,878	-558	-22.9%
Minnesota	1,190	1,061	-10.8%	977	-18.0%	977	-18.0%	799	-391	-32.9%
Mississippi	945	975	3.2%	1,091	15.4%	836	-11.5%	836	-109	-11.5%
Missouri	1,357	1,370	1.0%	1,342	-1.1%	1,035	-23.7%	1,035	-322	-23.7%
Montana	229	257	12.2%	220	-3.9%	189	-17.7%	189	-41	-17.7%
Nebraska	346	342	-1.3%	218	-36.9%	218	-36.9%	179	-167	-48.4%
Nevada	221	202	-8.7%	202	-8.7%	202	-8.7%	172	-50	-22.5%
New Hampshire	381	419	9.8%	381	n/c	381	n/c	312	-69	-18.2%
New Jersey	2,353	2,353	n/c	2,353	n/c	2,353	n/c	1,925	-428	-18.2%
New Mexico	422	389	-7.8%	428	1.4%	401	-4.9%	401	-21	-4.9%
New York	9,814	9,814	n/c	9,814	n/c	15,015	53.0%	15,015	5,201	53.0%
North Carolina	1,909	1,478	-22.6%	1,408	-26.2%	1,025	-46.3%	1,025	-885	-46.3%
North Dakota	195	150	-22.9%	107	-45.1%	80	-58.7%	80	-114	-58.7%
Ohio	3,121	3,303	5.8%	2,310	-26.0%	2,093	-32.9%	2,093	-1,028	-32.9%
Oklahoma	759	782	3.1%	757	-0.3%	574	-24.4%	574	-186	-24.4%
Oregon	596	685	14.8%	498	-16.5%	500	-16.2%	500	-96	-16.2%
Pennsylvania	3,114	3,600	15.6%	2,499	-19.8%	3,049	-2.1%	3,049	-65	-2.1%
Rhode Island	445	429	-3.6%	384	-13.6%	460	3.4%	460	15	3.4%
South Carolina	1,199	1,112	-7.2%	1,041	-13.2%	816	-32.0%	816	-384	-32.0%
South Dakota	187	164	-12.1%	146	-21.9%	100	-46.6%	100	-87	-46.6%
Tennessee	1,808	1,653	-8.6%	1,778	-1.6%	1,462	-19.1%	1,462	-346	-19.1%
Texas	4,587	3,631	-20.8%	4,619	0.7%	3,368	-26.6%	3,368	-1,220	-26.6%
Utah	360	304	-15.5%	172	-52.1%	176	-51.0%	176	-183	-51.0%
Vermont	153	191	24.7%	103	-33.0%	118	-22.9%	118	-35	-22.9%
Virginia	896	906	1.1%	896	n/c	896	n/c	733	-163	-18.2%
Washington	1,275	1,167	-8.4%	1,042	-18.3%	1,042	-18.3%	852	-422	-33.1%
West Virginia	916	862	-5.9%	867	-5.3%	670	-26.8%	670	-246	-26.8%
Wisconsin	1,278	1,287	0.7%	837	-34.5%	837	-34.5%	685	-593	-46.4%
Wyoming	90	44	-51.0%	44	-51.0%	44	-51.0%	36	-54	-59.9%

Note: all FMAPs include a squared term for the fiscal capacity index used except for the last two poverty-adjusted figures

index represents total taxable resources per person under 150% of poverty. TTR and poverty thresholds were both adjusted for state-level differences in the cost of living

lose both from replacing the PCPI and from lowering the minimum to 45 percent. The biggest losers would be Wyoming, Iowa, Nebraska, North Dakota, and Utah.

Finally, Table II.14 takes the four measures in Table II.13 and adjusts upward the FMAPs for each state to make the change budget-neutral for federal spending (although we make no assumptions regarding behavioral responses by states). This exercise indicates how some additional protections might be extended to states that lose under these reallocated formulas. Since the reductions at the national level are quite small for each of these alternatives, however, it is not possible to provide much relief to states. For example, North Dakota's loss of 58.7 percent under the TTR/Poverty/COL combination is only reduced to a 57.7 percent loss. And if, in the last column, funds from both the TTR/Poverty/COL combination and from reducing the lower bound to 45 percent were allocated to states with FMAPs above 45 percent, federal payments to North Dakota would only fall by 56 percent. And Wyoming would actually experience an even greater loss since its FMAP would fall to 45 under this alternative.

Conclusions

The very dramatic results from these simulations suggest that even moderate changes in the formula for the FMAP could result in major redistributions across states. Moreover, our results suggest there are likely to be more losers than winners by state. (This is not the same as the number of recipients who might be affected, however, since California and New York have the largest Medicaid programs and would gain substantially from several of the more promising approaches.) In general, any change in the fiscal capacity measure by itself has little overall impact on the FMAP calculations. Rather, the larger changes are associated with incorporating poverty shares as an indicator of need and with adjustments to the capacity and need measures for cost of living differences across states. If the

Table II.14

1993 FEDERAL MEDICAID SPENDING (MILLIONS OF DOLLARS)

Based on Alternative FMAP Formulas, and Total Taxable Resources (TTR), 1991

Holding State, Aggregate Federal Expenditures Constant

Adjusted multiplier, 50%, 83% FMAP bounds

	Current FMAP	Unadjusted TTR		TTR / Poverty Combination		TTR / Poverty Combination adjusted for COL ¹		TTR / Poverty Combination adjusted for COL ¹ (lower limit set to 0.45%)	
		FMAP	Percent change in expend.	FMAP	Percent change in expend.	FMAP	Percent change in expend.	FMAP	Percent change in expend.
Total	57.1	57.1	n/c	57.1	n/c	57.1	n/c	57.1	n/c
Alabama	71.5	71.9	2.4%	73.2	9.3%	68.0	-15.1%	68.7	-12.4%
Alaska	50.0	50.0	n/c	50.0	n/c	50.0	n/c	45.0	-18.2%
Arkansas	74.4	75.7	7.0%	75.1	3.7%	68.6	-24.7%	69.3	-22.4%
California	50.0	50.0	n/c	56.3	28.9%	59.5	46.9%	60.3	52.1%
Colorado	54.4	54.2	-0.7%	50.0	-16.2%	50.0	-16.2%	45.0	-31.5%
Connecticut	50.0	50.0	n/c	50.0	n/c	50.0	n/c	45.0	-18.2%
Delaware	50.0	50.0	n/c	50.0	n/c	50.0	n/c	45.0	-18.2%
District of Columbia	50.0	50.0	n/c	50.0	n/c	50.0	n/c	45.0	-18.2%
Florida	55.0	64.1	45.9%	64.4	48.1%	59.2	18.5%	60.0	22.7%
Georgia	62.1	59.2	-11.5%	63.7	7.1%	56.2	-21.6%	57.1	-18.7%
Hawaii	50.0	50.0	n/c	50.0	n/c	69.7	130.1%	70.3	137.1%
Idaho	71.2	71.6	2.1%	67.5	-16.0%	62.5	-32.5%	63.3	-30.2%
Illinois	50.0	50.9	3.8%	51.7	7.2%	51.4	5.9%	52.4	10.2%
Indiana	63.2	62.7	-2.3%	58.2	-18.9%	53.0	-34.3%	54.0	-31.7%
Iowa	62.7	64.2	6.7%	53.1	-32.8%	50.0	-40.6%	45.0	-51.4%
Kansas	58.2	61.8	16.3%	52.1	-21.8%	50.0	-28.1%	45.0	-41.2%
Kentucky	71.7	68.3	-14.9%	71.2	-2.3%	62.9	-33.1%	63.7	-30.8%
Louisiana	73.7	64.0	-36.7%	72.2	-7.6%	67.4	-26.3%	68.1	-24.0%
Maine	61.8	66.8	24.1%	61.5	-1.3%	64.6	12.6%	65.3	16.3%
Maryland	50.0	50.0	n/c	50.0	n/c	50.0	n/c	45.0	-18.2%
Massachusetts	50.0	50.0	n/c	50.0	n/c	50.0	n/c	48.2	-7.0%
Michigan	55.8	59.0	14.0%	55.8	-0.4%	50.0	-20.9%	51.0	-17.6%
Minnesota	54.9	52.8	-8.3%	50.0	-18.0%	50.0	-18.0%	45.0	-32.9%
Mississippi	79.0	79.8	5.1%	81.9	20.2%	77.2	-10.1%	77.7	-7.6%
Missouri	60.3	61.1	3.4%	61.3	4.4%	54.2	-21.9%	55.2	-18.8%
Montana	70.9	73.6	14.4%	71.1	0.7%	67.2	-16.1%	67.8	-13.5%
Nebraska	61.3	61.6	1.1%	50.3	-36.2%	50.0	-36.9%	45.0	-48.4%
Nevada	52.3	50.0	-8.7%	50.0	-8.7%	50.0	-8.7%	47.7	-16.7%
New Hampshire	50.0	53.0	12.9%	50.0	n/c	50.0	n/c	45.0	-18.2%
New Jersey	50.0	50.0	n/c	50.0	n/c	50.0	n/c	45.0	-18.2%
New Mexico	73.9	72.7	-5.9%	75.0	6.0%	73.2	-3.3%	73.8	-0.5%
New York	50.0	50.0	n/c	50.0	n/c	61.0	56.2%	61.8	61.6%
North Carolina	65.9	60.5	-20.7%	60.1	-22.0%	51.5	-45.0%	52.6	-42.7%
North Dakota	72.2	67.2	-21.2%	60.1	-41.9%	52.4	-57.7%	53.3	-56.0%
Ohio	60.3	62.2	8.4%	54.4	-21.3%	51.0	-31.3%	52.0	-28.4%
Oklahoma	69.7	70.7	5.2%	70.6	4.5%	63.9	-22.9%	64.6	-20.4%
Oregon	62.4	66.1	17.4%	59.4	-11.7%	58.7	-14.4%	59.6	-11.3%
Pennsylvania	55.5	59.6	18.5%	50.6	-17.9%	55.5	0.1%	56.4	4.0%
Rhode Island	53.6	53.4	-0.9%	50.0	-13.6%	55.0	5.8%	56.0	9.9%
South Carolina	71.3	70.2	-5.3%	69.3	-8.9%	63.3	-30.6%	64.0	-28.3%
South Dakota	70.3	68.0	-10.2%	66.0	-17.8%	56.4	-45.4%	57.3	-43.3%
Tennessee	67.6	66.1	-6.5%	68.3	3.3%	63.2	-17.5%	64.0	-14.7%
Texas	64.4	59.5	-18.8%	65.7	5.9%	57.6	-25.0%	58.5	-22.2%
Utah	75.3	72.4	-13.7%	60.7	-49.4%	60.4	-49.9%	61.2	-48.2%
Vermont	59.9	65.6	27.5%	50.0	-33.0%	54.1	-21.1%	55.0	-18.0%
Virginia	50.0	51.0	4.1%	50.0	n/c	50.0	n/c	45.0	-18.2%
Washington	55.0	53.5	-5.8%	50.0	-18.3%	50.0	-18.3%	45.0	-33.1%
West Virginia	76.3	75.5	-4.1%	76.1	-1.1%	70.6	-25.5%	71.2	-23.3%
Wisconsin	60.4	61.2	3.1%	50.0	-34.5%	50.0	-34.5%	45.0	-46.4%
Wyoming	67.1	50.0	-51.0%	50.0	-51.0%	50.0	-51.0%	45.0	-59.9%

Note: all FMAPs include a squared term for the fiscal capacity index used except for the last two poverty-adjusted figures

Inox represents total taxable resources per person under 150% of poverty. TTR and poverty thresholds were both adjusted for state-level differences in the cost of living.

Medicaid program were to change in ways that would affect the balance between acute and long term care spending or what populations are served, changes in the FMAP to target on the specific needs of the covered population might be in order.

Major redistributions in federal funding across states would likely be politically controversial and perhaps impractical to implement. Nonetheless, strong arguments can be made that several or all of these measures would be improvements over the current system in terms of treating states fairly. The current system has locked in place FMAPs that are higher than justified for some states and too low for others. Practical implementation of changes might require adjustments to hold states harmless to a certain degree (i.e., within a given percentage of current spending), or perhaps to limit the amount of increased federal funding that might be available in order to pave the way for improvements in the fair treatment of states.

Even if a fairer formula were adopted for Medicaid, however, we should not expect this program to result in a more equal distribution of spending on low income populations. Compare the results in Table II.1, which summarized mean Medicaid spending per person under 150 percent of poverty in each state, with the results in Table II.12 of potential new FMAPs. The biggest winners already have large Medicaid programs, while many of the states that would lose have very modest programs. Such changes thus would certainly not equalize spending which varies for many reasons that go beyond ability to support spending and needs. States would likely continue to have very different spending levels per poor person even if the FMAP formula changed. To achieve that goal would likely require more dramatic changes in the Medicaid program than modifying the FMAP formula.

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APPENDIX

FISCAL CAPACITY INCOME / TAX BASES

Table II.A

Total Personal Income

Bureau of Economic Analysis

Wage and salary disbursements

- Reported payrolls for industries covered by the UI program
- BEA additions to UI data
- Cash wages and salaries in industries not covered by the UI program
- Wages and salaries paid in kind

Other labor income

- Employer contributions to private pension funds and private welfare funds
- Private pension funds, group life insurance, and supplemental unemployment insurance
- Privately administered workers' compensation
- All other (directors' fees, compensation to prisoners, and judicial fees)

Proprietors' income

- Farm
- Nonfarm
 - Agricultural services, forestry, and fisheries
 - Mining
 - Construction
 - Manufacturing
 - Transportation and public utilities
 - Wholesale and retail trade
 - Finance, insurance, and real estate
 - Services
 - Business services
 - Professional and social services

Dividends, interest, and rent

- Personal dividend income
- Personal interest income
 - Monetary
 - Imputed
- Rental income of persons
 - Monetary
 - Imputed

Transfer payments

- Government payments to individuals
 - Retirement and disability insurance benefit payments
 - Old-age, survivors, and disability insurance payments
 - Railroad retirement and disability payments

Transfer payments (continued)

- Military retirement payments
- State and local government employee retirement payments
- Workers compensation benefits
- Other government disability insurance payments
- Medical payments (Medicare payments, medical vendor payments, and CHAMPUS)
- Income maintenance benefit payments
 - Supplemental security income (SSI) payments
 - Aid to families with dependent children
 - Food stamps
 - Other income maintenance
- Unemployment insurance benefit payments
 - State unemployment compensation
 - Unemployment compensation of Federal civilian employees
 - Unemployment compensation of railroad employees
 - Unemployment compensation of veterans
 - Other unemployment compensation
- Veterans benefit payments
 - Veterans pension and disability benefit payments
 - Educational assistance to veterans, dependents, and survivors
 - Veterans life insurance benefit payments
 - Other assistance to veterans
- Federal education and training assistance payments (other than for veterans)
- Other government payments to individuals
- Payments to nonprofit institutions
 - Federal Government payments
 - State and local government payments
 - Business payments
- Business payment to individuals

Less:

- Personal contributions for social insurance
 - Contributions to old-age, survivors, disability, and hospital insurance
 - Employee contributions
 - Self-employed contributions
- Supplementary medical insurance contributions
- Federal civilian employee retirement contributions
- Railroad employee retirement contributions
- State and local government employee retirement contributions
- Veterans life insurance contributions
- State unemployment insurance and temporary disability contributions

Table II.B

Tax Bases Used in the Representative Revenue System

<u>Revenue Base</u>	<u>Detail</u>
General Sales and Gross Receipts Taxes	retail sales and receipts of selected service industries
Selective Sales Taxes	
pari-mutuel	pari-mutuel turnover from horse and dog racing and jai alai
motor fuel	fuel consumption in gallons
insurance	insurance premiums; life, health, property, and liability
tobacco	cigarette consumption in packages
amusement	receipts of amusement and entertainment businesses
public utilities	revenues of electric, gas, and telephone companies
distilled spirits	consumption of distilled spirits in gallons
beer	consumption of beer in barrels (31 gal)
wine	consumption of wine in gallons
License Taxes	
vehicle operator	motor vehicle operators' licenses
corporation	number of corporations
hunting and fishing	number of hunting and fishing licenses
alcoholic beverages	licenses for the sale of distilled spirits
automobile	private automobile registrations
truck	private truck registrations
Personal Income Taxes	federal income tax liability
Corporation Net Income and Net Worth Taxes	corporate profits
Property Taxes	
residential	market value of residential property
farm	market value of farm real estate
commercial / industrial	net book value of inventories, property, industrial plant and equipment of corporations
public utilities	net book value of fixed assets for electric, gas, and telephone companies
Estate and Gift Taxes	federal estate and gift tax collections
Severance Taxes	
oil and gas	value of oil and gas production
coal	value of coal production
non-fuel mineral	value of nonfuel mineral production
Other Taxes	personal income
Rents and Royalties	state receipts from rents and royalties
Lottery Net Income	estimated gross lottery sales
User Charges and Special Assessments	personal income

Table II.C
Gross State Product
Bureau of Economic Analysis

Compensation of Employees

- Wages and salaries
- Supplements to wages and salaries
 - Employer contributions to social insurance
 - Other labor income

Proprietors' income with inventory valuation and capital consumption adjustments

- Farm
 - Proprietors' income with inventory valuation adjustment
 - Capital consumption adjustment
- Nonfarm
 - Proprietors' income
 - Inventory valuation adjustment
 - Capital consumption adjustment

Rental income of persons with capital consumption adjustment

- Rental income of persons
- Capital consumption adjustment

Corporate profits with inventory valuation and capital consumption adjustment

- Profits before tax
- Inventory valuation adjustment
- Capital consumption adjustment

Net interest

Business transfer payments

Indirect business tax and nontax liability

Less: Subsidies less current surplus of government enterprises

Capital consumption allowances with capital consumption adjustment

- Capital consumption allowances
 - Corporate
 - Noncorporate
- Less: Capital consumption adjustment
 - Corporate
 - Noncorporate

CHAPTER III: TOWARDS A RATIONAL DISTRIBUTION OF DISPROPORTIONATE SHARE HOSPITAL PAYMENTS¹

Introduction

Whether or not the political environment is conducive to doing broad based private health insurance reform or reform of the larger Medicaid system, Medicaid's disproportionate share hospital (DSH) program deserves further attention. There is tremendous interstate variation in DSH program participation, and the distribution of federal dollars across states is largely unrelated to even the inadequate fiscal capacity measure in the current matching formula. In fact many states have used the DSH program to effectively increase their federal matching rates. Although recent legislation has limited the rates at which a state can expand the size of its DSH program, the current levels of federal spending are largely a product of expansions prior to this legislation. Without reform, the substantial inequities between states which have been promulgated by this program will continue into the foreseeable future. Consequently, it is appropriate to examine DSH issues in the context of changing the financing for Medicaid.

This chapter examines the current distribution of federal spending for Medicaid payments to disproportionate share hospitals (DSH) and suggests a number of alternative ways that these funds might be distributed. We begin by summarizing the intent of the DSH payment legislation and describe how the use of disproportionate share payments has grown in recent years. We discuss the link to special financing programs such as provider taxes and donations and intergovernmental transfers and their role in spurring the growth of DSH payments. We present data to show how the federal DSH dollars are currently distributed. Finally, we examine a set of alternative policies and their distributional impacts.

¹ This chapter was written by John Holahan.

Disproportionate share hospital payments arose from Congressional concern over the financial status of hospitals that serve large numbers of low-income patients with special needs. The Omnibus Budget Reconciliation Act of 1981 recognized this problem and required that Medicaid payment rates "take into account the situation of hospitals serving a disproportionate number of low-income patients with special needs" (OBRA 1981). Subsequent legislation went further in clarifying this legislation. For example, the Consolidated Omnibus Budget Reconciliation Act of 1985 discussed how states should identify hospitals that serve a disproportionate share of low-income patients and required the Secretary of Health and Human Services to report on how states have implemented the 1981 legislation. The Omnibus Budget Reconciliation Act of 1986 went further and prohibited the Secretary from limiting the amount of DSH payments that any hospital could receive (OBRA 1986). This section allowed states to make DSH payments to individual hospitals in excess of amounts allowed by Medicare. According to this legislation:

Under Section 1902(h) of the Act, states are free to make payment adjustments to disproportionate share hospitals without regard to the Medicare upper payment limit, which applies to all other Medicaid payments to institutional providers.

Through this series of changes to Medicaid rules, the Congress clearly indicated its intent to assist hospitals providing large amounts of uncompensated care or experiencing financial difficulties because of serving Medicaid patients. Nonetheless, states continue to have considerable flexibility in determining which hospitals are eligible for DSH payment adjustments and the actual size of the adjustment. Beginning approximately in 1988-1989, the use of DSH payments began to grow rapidly. From relatively low levels, Medicaid DSH payments grew to over \$17 billion in 1992 or to over 15 percent of Medicaid expenditures. The growth in DSH payments had a huge impact on the extremely rapid rate of growth that occurred between 1988 and 1992 in Medicaid spending. For

example, it has been estimated that 27.6 percent of Medicaid spending growth between 1988 and 1992 was attributed to increases in DSH payments (Holahan 1995). The increase in DSH payments also had a major impact on the public perception of the Medicaid program as one that was "out of control."

Much of the growth in Medicaid DSH spending was spurred by the use of provider donations and taxes as well as intergovernmental transfers to finance the state share of these expenditures. Under these mechanisms, simply stated, a hospital would make a donation or pay a tax to the state. The state would in turn make DSH payments to the same hospitals. The DSH payments would consist of the return of the provider donation or taxes, (usually) some state general revenues, as well as federal matching payments. Typically, hospitals received more in DSH payments than they had contributed in provider donations and taxes and more in DSH and in direct reimbursement for services than they had been receiving from the state before the DSH program. The intent of the transaction is that hospitals would in general be winners. Often hospitals received less from state general revenue funds than they had previously. The real impact was that the federal government is in effect paying more in federal matching payments.

In addition to provider donations and taxes, states used intergovernmental transfers. For example, a local government might transfer funds to the state, which then would make DSH payments (which would include federal matching dollars) directly to city or county hospitals. This transfer would replace some if not all of the payments that would otherwise be made by the local government. In this case, cities or counties might be better off, or at least no worse off financially. Hospitals could gain additional funds and federal payments to states would increase. On balance, the state would gain.

In other cases, states that traditionally financed, for example, mental hospitals, with state general revenues would instead transfer these funds to the Medicaid programs. The state Medicaid program would then make DSH payments to mental hospitals. Again, the state funding would potentially pay considerably less than it had before. The hospital could receive more than it had originally and the federal government's spending in the state would be substantially increased. In some cases, states would transfer funds that would be allocated to state university hospitals to the Medicaid program. The state's Medicaid program would make disproportionate share payments to the hospitals, including federal matching payments. The hospital would transfer all or most of the increase in revenues from the DSH payments back to the state. Most of the transfer from the federal government to the hospital in the form of DSH payments would, therefore, really end up as a gain to the state treasury.

The extent to which DSH dollars actually go to provide additional uncompensated care has in many cases been unclear.² Frequently, the savings received by states were used to fund other Medicaid services such as the eligibility expansions to cover pregnant women and children. However, they were also used in ways that were highly controversial. For example, they were used to fund other state activities, such as the often-cited example of funding highway expansion in New Hampshire (Morgan, 1993). In many cases, states were simply able to reduce their budget deficits.

In order to limit the growth in DSH payments, the Bush Administration and the states reached a compromise that became the Medicaid Voluntary Contribution and Provider-Specific Tax Amendments of 1991. These amendments had various provisions, including banning provider donations, capping provider taxes so the provider tax revenues did not exceed 25 percent of the state's share of Medicaid expenditures, and requiring that the taxes be broad-based (i.e., they must

² For an extensive discussion of these issues, see Ku and Coughlin 1994.

apply to all hospitals, even those not designated as DSH hospitals) and providers not be held harmless (i.e., hospitals' tax payments could not be systematically offset by DSH payments). These amendments also imposed an overall national limit on DSH payments equal to 12 percent of Medicaid expenditures, exclusive of administrative costs. These targets limited states whose DSH payments were above 12 percent of their Medicaid expenditures to zero growth in absolute dollar terms. States whose DSH payments were less than 12 percent could increase them at the same rate as their overall Medicaid expenditure growth and somewhat faster as funds became available (because of the cap on high DSH states) until eventually their DSH payments would be equal to 12 percent of their Medicaid expenditures. Further amendments in 1993 limited states DSH expenditures to hospitals that had at least 1 percent Medicaid utilization. It also required that DSH payments could not exceed a hospital's uncompensated care expenditures and/or their loss on Medicaid patients.

Regardless of how the state share of DSH payments is used, and whether the state share is a real expenditure or simply a paper transfer, the federal funds represent real expenditures of federal general revenues. Thus, the question of how these funds are allocated across states is of extreme importance. The issue is whether they are allocated in proportion to the needs of states to care for the needs of the uninsured, consistent with the intent of the original legislation.

Current Distribution of DSH Payments

An examination of the current distribution of DSH payments shows a highly inequitable distribution of these funds. The distribution of funds is very simply a function of how aggressively states have used the special financing mechanisms and disproportionate share payments. Tables

III.1 and III.2 show the distribution of DSH expenditures among states.³ Disproportionate share expenditures amounted to \$16.9 billion in 1993, equal to 13.5 percent of total Medicaid expenditures, excluding administrative costs.⁴ The states with the largest DSH payments in absolute dollars were New York and California, followed by Texas, Louisiana, and New Jersey. As shown in Table III.1, there are a number of states that made little or no use of this mechanism.

Disproportionate share payments as a percentage of total (federal and state) expenditures are shown in column B. Over half of New Hampshire's Medicaid expenditures were accounted for by DSH payments. Disproportionate share payments amounted to more than 20 percent of Medicaid expenditures in Alabama, Kansas, Louisiana, Missouri, New Jersey, South Carolina, and Texas. In ten other states, these payments represent less than 1 percent of Medicaid expenditures.

There are a number of ways to look at the distribution of disproportionate share expenditures. In Tables III.1 and III.2, we examine the distribution of DSH spending per capita, per person under 150 percent of poverty, and per uninsured person. In per capita terms, disproportionate share payments amounted to \$67 per state resident. This ranged from as high as \$332 in New Hampshire and \$289 in Louisiana, to less than \$1 per person in Wyoming, South Dakota, North Dakota, Montana, and Idaho.

One proxy measure of the target population for DSH dollars is the population below 150 percent of poverty. Approximately 50 percent of Americans lacking health insurance have

³ The Medicaid spending and disproportionate share expenditure data used in this analysis are from the HCFA Form 64 (*State Quarterly Statements of Medicaid Expenditures for the Medical Assistance Program*). The expenditures reported on HCFA Form 64 are based on date of provider reimbursement and are more representative of calendar instead of state or federal fiscal years. As a result, some states may appear to report DSH expenditures above their mandated DSH caps.

⁴ Administrative costs are not considered in calculating the 12% DSH expenditure limit (Federal Register, 1994).

Table III.1
1993 Disproportionate Share Payments

State	DSH		DSH Expenditures per			
	(A) (millions)	(B) as a % of federal and state Medicaid expend.	(C) capita	Medicaid beneficiary	(D) person under 150% of poverty	(E) uninsured person
Total	\$16,944.0	13.5%	\$67.2	\$527.4	\$279.6	\$491.2
Alabama	419.1	25.6%	100.3	803.7	322.7	589.1
Alaska	33.3	12.4%	63.4	511.9	248.3	338.8
Arkansas	2.5	0.2%	1.0	7.5	3.3	6.1
California	2,542.5	18.8%	81.6	526.0	311.3	482.6
Colorado	130.5	12.0%	38.8	465.1	193.4	326.1
Connecticut	417.3	18.3%	126.7	1,267.4	1,076.7	1,720.0
Delaware	5.2	2.1%	7.2	75.3	41.0	56.7
District of Columbia	46.1	6.7%	83.7	384.6	255.1	408.9
Florida	239.7	4.8%	17.5	137.4	65.9	92.9
Georgia	309.4	11.1%	47.4	324.8	171.5	289.0
Hawaii	43.9	11.5%	38.1	399.7	171.4	570.4
Idaho	1.0	0.3%	0.9	9.8	3.5	5.8
Illinois	240.1	4.8%	19.9	172.1	87.3	177.6
Indiana	33.8	1.2%	6.0	60.3	26.1	52.8
Iowa	4.0	0.4%	1.4	13.9	6.9	15.3
Kansas	184.4	20.7%	71.5	759.6	352.5	688.2
Kentucky	137.0	7.4%	37.1	222.1	120.7	305.6
Louisiana	1,217.6	32.6%	288.5	1,669.7	851.2	1,505.9
Maine	164.1	19.3%	128.6	972.0	546.6	1,186.1
Maryland	77.8	4.0%	16.0	176.3	91.7	146.3
Massachusetts	484.5	12.0%	81.6	636.3	460.0	835.2
Michigan	544.7	12.5%	58.0	465.6	255.1	620.2
Minnesota	32.3	1.5%	7.3	76.4	35.6	67.7
Mississippi	152.3	12.7%	56.0	303.1	143.6	302.1
Missouri	703.1	31.2%	134.6	1,153.8	531.1	1,045.6
Montana	0.5	0.2%	0.6	7.4	2.3	4.5
Nebraska	3.3	0.6%	2.0	21.0	10.3	24.0
Nevada	80.3	19.0%	62.2	907.7	290.1	332.3
New Hampshire	382.9	50.2%	332.2	4,868.4	2,192.4	2,740.4
New Jersey	1,088.2	23.1%	138.1	1,391.8	871.1	1,252.8
New Mexico	8.8	1.5%	5.6	36.7	17.1	27.0
New York	2,558.7	13.0%	141.2	933.7	582.0	1,112.7
North Carolina	345.5	11.9%	51.7	384.6	208.8	390.7
North Dakota	0.0	0.0%	0.0	0.2	0.1	0.2
Ohio	449.0	8.7%	40.1	302.9	189.2	421.1
Oklahoma	23.5	2.2%	7.3	63.8	25.2	39.5
Oregon	20.6	2.2%	6.8	63.3	30.2	55.2
Pennsylvania	811.1	14.5%	65.6	663.2	324.5	742.1
Rhode Island	97.2	11.7%	100.2	508.3	566.4	1,083.5
South Carolina	440.7	26.2%	123.0	949.0	439.2	759.5
South Dakota	0.0	0.0%	0.0	0.2	0.1	0.1
Tennessee	430.2	16.1%	85.9	473.7	297.7	630.1
Texas	1,513.0	21.3%	87.1	655.4	298.3	417.4
Utah	4.5	0.9%	2.5	30.1	11.9	22.7
Vermont	18.6	7.3%	31.1	231.5	170.4	328.4
Virginia	130.8	7.3%	20.6	227.3	105.7	133.8
Washington	257.0	11.1%	50.8	406.1	296.2	484.5
West Virginia	105.3	8.8%	58.1	303.5	178.6	460.0
Wisconsin	7.6	0.4%	1.5	16.2	8.0	19.8
Wyoming	0.1	0.1%	0.2	2.0	1.0	1.7

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993.

Note: Arizona and U.S. Territories are not included

Table III.2

**1993 Disproportionate Share Payments
Indexed to National Average**

State	(A) DSH as a % of federal and state Medicaid expend.	DSH Expenditures per			(D) uninsured person
		(B) capita	Medicaid beneficiary	(C) person under 150% of poverty	
Total	100	100	100	100	100
Alabama	189	149	152	115	120
Alaska	92	94	97	89	69
Arkansas	2	2	1	1	1
California	139	121	100	111	98
Colorado	88	58	88	69	66
Connecticut	135	189	240	385	350
Delaware	15	11	14	15	12
District of Columbia	50	124	73	91	83
Florida	36	26	26	24	19
Georgia	82	71	62	61	59
Hawaii	85	57	76	61	116
Idaho	2	1	2	1	1
Illinois	36	30	33	31	36
Indiana	9	9	11	9	11
Iowa	3	2	3	2	3
Kansas	153	106	144	126	140
Kentucky	54	55	42	43	62
Louisiana	241	429	317	304	307
Maine	142	191	184	195	241
Maryland	29	24	33	33	30
Massachusetts	88	121	121	165	170
Michigan	92	86	88	91	126
Minnesota	11	11	14	13	14
Mississippi	94	83	57	51	62
Missouri	231	200	219	190	213
Montana	1	1	1	1	1
Nebraska	4	3	4	4	5
Nevada	140	93	172	104	68
New Hampshire	371	494	923	784	558
New Jersey	171	205	264	312	255
New Mexico	11	8	7	6	6
New York	96	210	177	208	227
North Carolina	88	77	73	75	80
North Dakota	0	0	0	0	0
Ohio	64	60	57	68	86
Oklahoma	16	11	12	9	8
Oregon	16	10	12	11	11
Pennsylvania	107	98	126	116	151
Rhode Island	87	149	96	203	221
South Carolina	193	183	180	157	155
South Dakota	0	0	0	0	0
Tennessee	119	128	90	106	128
Texas	157	130	124	107	85
Utah	7	4	6	4	5
Vermont	54	46	44	61	67
Virginia	54	31	43	38	27
Washington	82	76	77	106	99
West Virginia	65	86	58	64	94
Wisconsin	3	2	3	3	4
Wyoming	1	0	0	0	0

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS.

1991, 1992, and 1993.

Note: Arizona and U.S. Territories are not included.

incomes below 150 percent of poverty. One would expect that DSH payments would be related to poverty because, while the Medicaid program serves a large share of the poverty population, it does not cover all because of categorical requirements. Disproportionate share payments amounted to an average of \$280 per person under 150 percent of poverty. This ranged from \$2,192 in New Hampshire, \$1,077 in Connecticut, and \$851 in Louisiana to under \$5 per person in six states. As shown in Table III.2, New Hampshire's DSH payments per low-income person were more than seven times the national average. Connecticut, New Jersey, and Louisiana had DSH payments per low-income person more than three times the national average. In contrast, payments in Arkansas, Idaho, Iowa, Montana, Nebraska, North Dakota, South Dakota, Utah, Wisconsin, and Wyoming were less than 5 percent of the national average. The problem with this measure, however, is that the share of the low-income population served by Medicaid is much higher in some states than others. Thus, the need for DSH dollars is greater in states with less generous Medicaid programs.

A third way to look at the distribution of DSH dollars is relative to the number of people who lack health insurance. This is probably the most direct measure of need for DSH payments. In principle, DSH spending per uninsured person should be equal across states. In 1993, DSH dollars averaged \$491 per uninsured person. Disproportionate share payments amounted to \$2,740 in New Hampshire and over \$1,000 per uninsured person in Connecticut, Louisiana, Maine, Missouri, New Jersey, New York, and Rhode Island. On the other hand, DSH dollars were less than \$10 per uninsured person in Arkansas, Idaho, Montana, North Dakota, South Dakota, and Wyoming. Payments in New Hampshire were over five times the national average, payments in Connecticut and Louisiana were three times the national average, and payments in Maine, Missouri, New Jersey, New York, and Rhode Island were more than twice the national average. Payments in Arkansas,

Idaho, Iowa, Montana, North Dakota, South Dakota, Wisconsin, and Wyoming were less than 5 percent of the national average.

The current distribution of DSH dollars is generally not equitable nor distributed in relation to need. Payments are high in many low-income southern states, but virtually nonexistent in others. Disproportionate share payments are high in some of the larger northern industrialized states with large pockets of poverty, but relatively low in others. Payments tend to be above average in larger states, e.g., Texas, California, New York, and New Jersey, but not always, e.g., Massachusetts, Illinois, and Florida. Most smaller states make less use of this mechanism, but not all, e.g., South Carolina, Maine.

Table III.3 shows the distribution of DSH payments, assuming that the national target of 12 percent of Medicaid expenditures was met in each state. This approach is relevant because it appears to be the intent of Congress to move to a distribution equal to 12 percent of total Medicaid expenditures, excluding administrative costs, in each state following the period of transition. Columns A and B show the distribution of current actual DSH payments, both in total and the federal share. Column D shows the distribution of federal DSH dollars if these payments were equal to 12 percent of federal Medicaid expenditures in each state. Column E shows the change from current federal spending.

Federal DSH payments (across all states) would fall by \$1.10 billion because current DSH payments are greater than 12 percent of federal and state Medicaid expenditures. Most of the states with the largest financial losses in absolute dollars are states that now have large amounts of disproportionate share payments. These include California, Louisiana, Texas, New Jersey, and Missouri. The largest gainers are those states with relatively small amounts of current DSH

Table III.3

1993 Modified Disproportionate Share Payments
Based on 12% of Total Medicaid Expenditures
and Current FMAP Formula

State	Current DSH Dollars (millions)		(C) Current FMAP	(D)	(E)
	(A)	(B)		Modified Federal	Change in
	total	federal		DSH Payment to State (millions)	Federal Payments from Current (millions)
Total	\$16,944.0	\$9,718.4		\$8,581.0	(1,137.5)
Alabama	419.1	299.5	71.5%	140.4	(159.1)
Alaska	33.3	16.7	50.0%	16.1	(0.5)
Arkansas	2.5	1.9	74.4%	92.1	90.2
California	2,542.5	1,271.3	50.0%	812.3	(459.0)
Colorado	130.5	71.0	54.4%	71.3	0.2
Connecticut	417.3	208.7	50.0%	136.7	(72.0)
Delaware	5.2	2.6	50.0%	15.2	12.6
District of Columbia	46.1	23.0	50.0%	41.2	18.2
Florida	239.7	131.9	55.0%	326.8	194.9
Georgia	309.4	192.1	62.1%	208.5	16.4
Hawaii	43.9	22.0	50.0%	22.8	0.9
Idaho	1.0	0.7	71.2%	25.1	24.4
Illinois	240.1	120.0	50.0%	298.9	178.8
Indiana	33.8	21.3	63.2%	213.6	192.2
Iowa	4.0	2.5	62.7%	74.3	71.8
Kansas	184.4	107.3	58.2%	62.1	(45.2)
Kentucky	137.0	98.2	71.7%	160.3	62.1
Louisiana	1,217.6	897.5	73.7%	329.9	(567.5)
Maine	164.1	101.4	61.8%	63.1	(38.3)
Maryland	77.8	38.9	50.0%	117.6	78.7
Massachusetts	484.5	242.2	50.0%	242.6	0.4
Michigan	544.7	304.2	55.8%	292.3	(11.9)
Minnesota	32.3	17.7	54.9%	142.8	125.1
Mississippi	152.3	120.4	79.0%	113.4	(6.9)
Missouri	703.1	423.7	60.3%	162.8	(260.9)
Montana	0.5	0.4	70.9%	27.5	27.1
Nebraska	3.3	2.0	61.3%	41.5	39.5
Nevada	80.3	42.0	52.3%	26.6	(15.4)
New Hampshire	382.9	191.4	50.0%	45.8	(145.7)
New Jersey	1,088.2	544.1	50.0%	282.4	(261.7)
New Mexico	8.8	6.5	73.9%	50.6	44.1
New York	2,558.7	1,279.4	50.0%	1,177.7	(101.7)
North Carolina	345.5	227.8	65.9%	229.1	1.3
North Dakota	0.0	0.0	72.2%	23.4	23.4
Ohio	449.0	270.6	60.3%	374.5	103.9
Oklahoma	23.5	16.4	69.7%	91.1	74.7
Oregon	20.6	12.9	62.4%	71.5	58.7
Pennsylvania	811.1	450.0	55.5%	373.7	(76.4)
Rhode Island	97.2	52.1	53.6%	53.4	1.2
South Carolina	440.7	314.1	71.3%	143.9	(170.2)
South Dakota	0.0	0.0	70.3%	22.5	22.4
Tennessee	430.2	290.7	67.6%	216.9	(73.8)
Texas	1,513.0	975.0	64.4%	550.5	(424.5)
Utah	4.5	3.4	75.3%	43.2	39.8
Vermont	18.6	11.1	59.9%	18.4	7.2
Virginia	130.8	65.4	50.0%	107.5	42.1
Washington	257.0	141.4	55.0%	153.0	11.5
West Virginia	105.3	80.3	76.3%	109.9	29.6
Wisconsin	7.6	4.6	60.4%	153.3	148.8
Wyoming	0.1	0.1	67.1%	10.9	10.8

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993

spending relative to their current Medicaid expenditures. This would include states such as Florida, Illinois, Indiana, and Wisconsin.

In Table III.4, columns C and D show federal spending per uninsured person, both under the current system and with the distribution of DSH payments under the 12 percent rule. Viewed in these terms, the largest losers are those states with the largest disproportionate share programs relative to the size of their programs. This would include Alabama, Connecticut, Louisiana, Missouri, New Hampshire, New Jersey, Maine, and South Carolina. The largest gainers are those states with relatively small DSH payments. This would include states such as Arkansas, Idaho, Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming.

Columns F and G show that there are still widespread inequities in the distribution of these dollars. Because the 12 percent distribution formula would tie disproportionate share payments to current Medicaid spending, states that have higher levels of Medicaid expenditures would have higher levels of disproportionate share payments. Thus, states with high levels of Medicaid expenditures such as Connecticut, New York, and Rhode Island would have high DSH payments, although in the case of Connecticut and New York it would be substantially less than under the current system. At the same time, states such as Idaho, Montana, New Mexico, Oklahoma, Utah, Virginia, and Wyoming would receive substantially more than they do now but nonetheless still less than the national average per uninsured person.

A similar pattern is shown in Table III.5 where we show the distribution of DSH dollars, again assuming they are distributed equal to 12 percent of federal Medicaid expenditures, but where we examine federal spending relative to persons below 150 percent of poverty. The patterns of winners and losers are the same, but there are still large interstate differences in modified DSH payments per low-income person.

Table III.4

1993 Modified Disproportionate Share Payments
Based on 12% of Total Medicaid Expenditures
and Current FMAP Formula

State	(A) Federal DSH Payment to State (millions)	(B) Change from Current (millions)	Federal DSH Spending per uninsured person			Federal & State DSH Spending per uninsured person		
			(C)	(D)	(E)	(F)	(G)	(H)
			Current	Modified	Difference	Current	Modified	Difference
Total	\$8,581.0	(1,137.5)	\$282	\$249	(33)	\$491	\$435	(56)
Alabama	140.4	(159.1)	421	197	(224)	589	276	(313)
Alaska	16.1	(0.5)	169	164	(5)	339	328	(11)
Arkansas	92.1	90.2	5	221	217	6	297	291
California	812.3	(459.0)	241	154	(87)	483	308	(174)
Colorado	71.3	0.2	177	178	1	326	327	1
Connecticut	136.7	(72.0)	860	563	(297)	1,720	1,127	(593)
Delaware	15.2	12.6	28	166	137	57	332	275
District of Columbia	41.2	18.2	204	366	161	409	731	322
Florida	326.8	194.9	51	127	76	93	230	137
Georgia	208.5	16.4	179	195	15	289	314	25
Hawaii	22.8	0.9	285	297	11	570	593	23
Idaho	25.1	24.4	4	148	144	6	208	202
Illinois	298.9	178.8	89	221	132	178	442	265
Indiana	213.6	192.2	33	334	301	53	528	475
Iowa	74.3	71.8	10	286	276	15	455	440
Kansas	62.1	(45.2)	400	232	(169)	688	398	(290)
Kentucky	160.3	62.1	219	358	139	306	499	193
Louisiana	329.9	(567.5)	1,110	408	(702)	1,506	554	(952)
Maine	63.1	(38.3)	733	456	(277)	1,186	738	(448)
Maryland	117.6	78.7	73	221	148	146	442	296
Massachusetts	242.6	0.4	418	418	1	835	837	1
Michigan	292.3	(11.9)	346	333	(13)	620	596	(24)
Minnesota	142.8	125.1	37	300	263	68	546	478
Mississippi	113.4	(6.9)	239	225	(14)	302	285	(17)
Missouri	162.8	(260.9)	630	242	(388)	1,046	402	(644)
Montana	27.5	27.1	3	232	229	5	327	322
Nebraska	41.5	39.5	15	298	284	24	487	463
Nevada	26.6	(15.4)	174	110	(64)	332	210	(122)
New Hampshire	45.8	(145.7)	1,370	328	(1,043)	2,740	655	(2,085)
New Jersey	282.4	(261.7)	626	325	(301)	1,253	650	(603)
New Mexico	50.6	44.1	20	156	136	27	211	184
New York	1,177.7	(101.7)	556	512	(44)	1,113	1,024	(88)
North Carolina	229.1	1.3	258	259	2	391	393	2
North Dakota	23.4	23.4	0	451	451	0	625	624
Ohio	374.5	103.9	254	351	97	421	583	162
Oklahoma	91.1	74.7	28	153	126	40	220	181
Oregon	71.5	58.7	34	192	157	55	307	252
Pennsylvania	373.7	(76.4)	412	342	(70)	742	616	(126)
Rhode Island	53.4	1.2	581	595	14	1,084	1,109	26
South Carolina	143.9	(170.2)	541	248	(293)	760	348	(412)
South Dakota	22.5	22.4	0	225	225	0	320	320
Tennessee	216.9	(73.8)	426	318	(108)	630	470	(160)
Texas	550.5	(424.5)	269	152	(117)	417	236	(182)
Utah	43.2	39.8	17	220	203	23	292	270
Vermont	18.4	7.2	197	324	128	328	542	213
Virginia	107.5	42.1	67	110	43	134	220	86
Washington	153.0	11.5	267	288	22	484	524	39
West Virginia	109.9	29.6	351	480	129	460	629	169
Wisconsin	153.3	148.8	12	399	387	20	660	640
Wyoming	10.9	10.8	1	197	196	2	294	292

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993

Table III.5

**1993 Modified Disproportionate Share Payments
Based on 12% of Total Medicaid Expenditures
and Current FMAP Formula**

State	(A) Modified Federal DSH Payment to State (millions)	(B) Change from Current (millions)	Federal DSH Spending per Person Below 150% of Poverty			Federal & State DSH Spending per Person Below 150% of Poverty		
			(C)	(D)	(E)	(F)	(G)	(H)
			Current	Modified	Difference	Current	Modified	Difference
Total	\$8,581.0	(1,137.5)	\$160	\$142	(19)	\$280	\$248	(32)
Alabama	140.4	(159.1)	231	108	(122)	323	151	(171)
Alaska	16.1	(0.5)	124	120	(4)	248	240	(8)
Arkansas	92.1	90.2	2	120	118	3	162	159
California	812.3	(459.0)	156	99	(56)	311	199	(112)
Colorado	71.3	0.2	105	106	0	193	194	1
Connecticut	136.7	(72.0)	538	353	(186)	1,077	705	(371)
Delaware	15.2	12.6	21	120	99	41	240	199
District of Columbia	41.2	18.2	128	228	101	255	456	201
Florida	326.8	194.9	36	90	54	66	163	97
Georgia	208.5	16.4	106	116	9	172	186	15
Hawaii	22.8	0.9	86	89	3	171	178	7
Idaho	25.1	24.4	3	91	88	4	127	124
Illinois	298.9	178.8	44	109	65	87	217	130
Indiana	213.6	192.2	16	165	148	26	261	235
Iowa	74.3	71.8	4	129	124	7	205	198
Kansas	62.1	(45.2)	205	119	(86)	353	204	(148)
Kentucky	160.3	62.1	87	141	55	121	197	76
Louisiana	329.9	(567.5)	627	231	(397)	851	313	(538)
Maine	63.1	(38.3)	338	210	(128)	547	340	(206)
Maryland	117.6	78.7	46	139	93	92	277	186
Massachusetts	242.6	0.4	230	230	0	460	461	1
Michigan	292.3	(11.9)	142	137	(6)	255	245	(10)
Minnesota	142.8	125.1	20	157	138	36	287	251
Mississippi	113.4	(6.9)	113	107	(7)	144	135	(8)
Missouri	162.8	(260.9)	320	123	(197)	531	204	(327)
Montana	27.5	27.1	2	118	116	2	166	164
Nebraska	41.5	39.5	6	128	122	10	209	199
Nevada	26.6	(15.4)	152	96	(56)	290	184	(106)
New Hampshire	45.8	(145.7)	1,096	262	(834)	2,192	524	(1,668)
New Jersey	282.4	(261.7)	436	226	(210)	871	452	(419)
New Mexico	50.6	44.1	13	99	86	17	133	116
New York	1,177.7	(101.7)	291	268	(23)	582	536	(46)
North Carolina	229.1	1.3	138	138	1	209	210	1
North Dakota	23.4	23.4	0	163	163	0	226	226
Ohio	374.5	103.9	114	158	44	189	262	73
Okahoma	91.1	74.7	18	98	80	25	140	115
Oregon	71.5	58.7	19	105	86	30	168	138
Pennsylvania	373.7	(76.4)	180	149	(31)	325	269	(55)
Rhode Island	53.4	1.2	304	311	7	566	580	14
South Carolina	143.9	(170.2)	313	143	(170)	439	201	(238)
South Dakota	22.5	22.4	0	120	120	0	171	171
Tennessee	216.9	(73.8)	201	150	(51)	298	222	(76)
Texas	550.5	(424.5)	192	109	(84)	298	168	(130)
Utah	43.2	39.8	9	116	107	12	153	141
Vermont	18.4	7.2	102	168	66	170	281	111
Virginia	107.5	42.1	53	87	34	106	174	68
Washington	153.0	11.5	163	176	13	296	320	24
West Virginia	109.9	29.6	136	186	50	179	244	66
Wisconsin	153.3	148.8	5	162	157	8	267	259
Wyoming	10.9	10.8	1	115	115	1	172	171

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993

These results show that the distribution of dollars when current policy is fully implemented will still be highly inequitable and inconsistent with the original intent of legislation establishing DSH payments—that financial relief be provided to hospitals serving large numbers of low-income patients with special needs. The distribution will be based on current overall Medicaid spending regardless of the number of uninsured or low-income individuals in the state, or the amount of uncompensated care provided by the states' hospitals.

Alternative Approaches to Distributing DSH Payments

Given the considerable maldistribution of federal DSH payments (as well as evidence of inappropriate use of these funds), coupled with the need for deficit reduction, a case can be made that the DSH program should be eliminated. On the other hand, in the absence of universal coverage, a large number of uninsured Americans will continue to be a financial burden to many of the nation's hospitals, including several large public and/or teaching hospitals. The need to provide financial support to these institutions remains, particularly as an increasingly competitive health care system makes it difficult to shift the costs of uncompensated care to others. Thus, an equally compelling case can be made that the DSH program should be reformed, not eliminated.

We consider alternative ways that DSH dollars might be distributed among states. Federal DSH funds could be used to provide direct subsidies to deserving facilities. However, in order to preserve the state flexibility contained in the original DSH legislation, we consider only approaches that would continue to allow states to decide which facilities should receive subsidies. There are basically two approaches: one that equalizes federal and state spending per uninsured person and a second which equalizes federal and state spending per person below 150 percent of poverty. The former would target federal dollars directly on states with large uninsured populations and, thus, should bear a strong relationship to need. It would, however, reward states that have had restrictive

Medicaid programs, and weaken incentives to expand coverage. It is also more difficult to accurately measure the number of uninsured on an annual basis in each state. The second policy would be to distribute dollars in relationship to poverty independent of current state effort vis-a-vis Medicaid and as a result federal funds may be more poorly targeted.

The current distribution of federal DSH dollars could be restructured either with block grants or with closed-end matching grants, that is, matching payments with a cap on the total amount of federal spending equal to, current DSH expenditures. Under either approach, the share of DSH payments that would be borne by the federal government would vary because the federal matching payments would be structured to vary with ability to pay. Under a block grant, the federal government would allocate dollars directly to states in relation to the number of uninsured or the number of people below 150 percent of poverty. In a pure block grant, there would be no requirement that states spend their own resources on disproportionate share hospitals. The actual amount of spending on disproportionate share hospitals could therefore be less in some states than it is under current arrangements. New federal expenditures could replace existing state expenditures. States that currently have low DSH payments could experience an increase in federal DSH spending, but make no increase in their own effort.

If the DSH program were restructured as a closed-end matching grant program with a cap on total federal spending, states would have stronger incentives than under a block grant to contribute to DSH payments in order to maximize federal DSH expenditures. Federal and state expenditures would probably fall in most if not all high DSH states, but not as much as under a block grant because states would still be required to spend their own resources to receive federal matching funds. Both federal and state expenditures would increase in states now subject to a cap, assuming those states want more federal dollars than they now receive to assist disproportionate share

hospitals. Because the result would be more spending on hospitals serving the uninsured and/or low-income populations with special needs—the original intent of the DSH program—the remainder of this discussion assumes a policy that would be restructured as a closed-end matching grant with no overall increase in federal spending.

We also acknowledge the need for the current restrictions on the ways in which the state share of disproportionate share payments can be derived (i.e., taxes and donations, as well as extensions to restrict use of inter and intra government transfers). Further, we believe that the policy probably needs to be more restrictive on how DSH funds are used to assure that federal dollars are targeted on care provided to low-income individuals in hospitals that serve large proportions of low-income individuals. (How this might be done is beyond the scope of this work.)

The first results presented (Tables III.6 and III.7) assume that the current federal matching assistance formula is retained. The next results presented (Tables III.8 and III.9) assume the alternative federal matching assistance payment formula (FMAP) presented by Moon and Liska in Chapter II where the federal matching formula is altered to replace per capita personal income with a measure of total taxable resources per person under 150 percent of poverty (with both components adjusted for cost of living differences across states).

Table III.6 presents the distribution of DSH dollars based on the number of uninsured individuals using the current matching formula and holding total spending constant. (Because the focus is on the distributional consequences of alternative policies, we use current expenditures rather than the 12 percent estimate; the latter would produce more losers and fewer winners simply because of the decline in DSH spending.) The last column shows that federal/state spending per uninsured person would be \$491 in each state. Under this formula, the

Table III.6

1993 Modified Disproportionate Share Payments
Based on Number of Uninsured Individuals by State
and Current FMAP Formula

State	(A) Modified Total DSH Payment to State (millions)	(B) Modified Federal DSH Payment to State (millions)	(C) Change from Current (millions)	Federal DSH Spending per uninsured person			Federal & State DSH Spending per uninsured person		
				(D) Current	(E) Modified	(F) Difference	(G) Current	(H) Modified	(I) Difference
Total	\$16,944.0	\$9,892.4	174.0	\$282	\$287	5	\$491	\$491	(0)
Alabama	349.5	249.7	(49.8)	421	351	(70)	589	491	(98)
Alaska	48.3	24.1	7.5	169	246	76	339	491	152
Arkansas	204.5	152.2	150.3	5	366	361	6	491	485
California	2,587.6	1,293.8	22.5	241	246	4	483	491	9
Colorado	196.6	107.0	36.0	177	267	90	326	491	165
Connecticut	119.2	59.6	(149.1)	860	246	(614)	1,720	491	(1,229)
Delaware	45.0	22.5	19.9	28	246	217	57	491	434
District of Columbia	55.4	27.7	4.6	204	246	41	409	491	82
Florida	1,266.7	697.0	565.1	51	270	219	93	491	398
Georgia	525.9	326.4	134.4	179	305	125	289	491	202
Hawaii	37.8	18.9	(3.1)	285	246	(40)	570	491	(79)
Idaho	83.4	59.3	58.7	4	350	346	6	491	485
Illinois	663.9	332.0	211.9	89	246	157	178	491	314
Indiana	314.1	198.6	177.2	33	310	277	53	491	438
Iowa	127.8	80.2	77.7	10	308	299	15	491	476
Kansas	131.6	76.6	(30.7)	400	286	(115)	688	491	(197)
Kentucky	220.2	157.8	59.6	219	352	133	306	491	186
Louisiana	397.1	292.7	(604.8)	1,110	362	(748)	1,506	491	(1,015)
Maine	67.9	42.0	(59.4)	733	304	(430)	1,186	491	(695)
Maryland	261.3	130.7	91.8	73	246	172	146	491	345
Massachusetts	284.9	142.5	(99.8)	418	246	(172)	835	491	(344)
Michigan	431.4	240.9	(63.3)	346	274	(72)	620	491	(129)
Minnesota	234.0	128.6	110.8	37	270	233	68	491	423
Mississippi	247.7	195.7	75.3	239	388	149	302	491	189
Missouri	330.3	199.0	(224.7)	630	296	(334)	1,046	491	(554)
Montana	58.3	41.3	40.9	3	348	345	5	491	487
Nebraska	68.3	41.9	39.9	15	301	286	24	491	467
Nevada	118.6	62.0	20.1	174	257	83	332	491	159
New Hampshire	68.6	34.3	(157.1)	1,370	246	(1,125)	2,740	491	(2,249)
New Jersey	426.7	213.3	(330.8)	626	246	(381)	1,253	491	(762)
New Mexico	159.4	117.8	111.3	20	363	343	27	491	464
New York	1,129.5	564.7	(714.6)	556	246	(311)	1,113	491	(622)
North Carolina	434.4	286.4	58.6	258	324	66	391	491	100
North Dakota	25.4	18.4	18.4	0	355	355	0	491	491
Ohio	523.7	315.6	45.0	254	296	42	421	491	70
Oklahoma	291.7	203.2	186.9	28	342	315	40	491	452
Oregon	183.3	114.4	101.5	34	306	272	55	491	436
Pennsylvania	536.9	297.9	(152.2)	412	273	(139)	742	491	(251)
Rhode Island	44.0	23.6	(28.5)	581	263	(318)	1,084	491	(592)
South Carolina	285.0	203.1	(111.0)	541	350	(191)	760	491	(268)
South Dakota	49.1	34.5	34.5	0	345	345	0	491	491
Tennessee	335.4	226.6	(64.1)	426	332	(94)	630	491	(139)
Texas	1,780.6	1,147.4	172.4	269	317	48	417	491	74
Utah	96.3	72.5	69.2	17	370	353	23	491	468
Vermont	27.8	16.6	5.5	197	294	97	328	491	163
Virginia	479.9	240.0	174.6	67	246	179	134	491	357
Washington	260.6	143.4	1.9	267	270	4	484	491	7
West Virginia	112.4	85.8	5.4	351	375	24	460	491	31
Wisconsin	188.8	114.1	109.5	12	297	285	20	491	471
Wyoming	27.1	18.2	18.1	1	330	329	2	491	489

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993

total amount of federal and state DSH payments would be exactly equal to current spending. Under this approach, the federal payment would be equal to the number of uninsured individuals in the state times the federal share of the target payment per uninsured person. (Note that while federal plus state spending is held constant, the shift in spending among states, coupled with the impact of the FMAP, results in different levels of spending.) Column A shows the distribution of DSH payments under this formulation, column B federal DSH payments, and column C the change from the current distribution. Under this approach, 35 states would receive more funds than they do currently; only 15 states would lose.

The largest winners, not surprisingly, are those states that both have a large number of uninsured individuals and low current DSH payments. Conversely, the largest losers are those that have relatively high DSH payments currently relative to the number of uninsured individuals in those states. Under these terms, the largest winners in absolute dollars are Florida, Illinois, Indiana, Oklahoma, Texas, Virginia, and Arkansas. The largest losers are Louisiana, Missouri, New Jersey, New York, New Hampshire, Pennsylvania, and Connecticut. Column D shows the distribution of federal spending. In terms of federal spending per uninsured person, Arkansas would receive \$366 per person compared with \$5 today, while North Dakota and South Dakota would receive \$355 and \$345, respectively, compared with \$0 under the current arrangement. In contrast, New Hampshire would be the biggest loser, receiving \$246 per uninsured person compared with \$1,370 today.

Table III.7 shows the distribution of DSH payments based on the number of individuals below 150 percent of poverty. Again, the total amount of federal spending is slightly higher than under the current system. The total DSH spending per person below 150 percent of poverty would be equal to \$280 in each state. Thirty-two states would receive more than under the

Table III.7

1993 Modified Disproportionate Share Payments
Based on Number of Individuals Below 150% of Poverty by State
and Current FMAP Formula

State	(A) Modified Total DSH Payment to State (millions)	(B) Modified Federal DSH Payment to State (millions)	(C) Change from Current (millions)	Federal DSH Spending per Person Below 150% of Poverty			Federal & State DSH Spending per Person Below 150% of Poverty		
				(D) Current	(E) Modified	(F) Difference	(G) Current	(H) Modified	(I) Difference
Total	\$16,944.0	\$9,952.9	235	\$160	\$164	4	\$280	\$280	0
Alabama	363.2	259.5	(40.0)	231	200	(31)	323	280	(43)
Alaska	37.5	18.8	2.1	124	140	16	248	280	31
Arkansas	213.7	159.0	157.1	2	208	206	3	280	276
California	2,283.6	1,141.8	(129.5)	156	140	(16)	311	280	(32)
Colorado	188.8	102.7	31.7	105	152	47	193	280	86
Connecticut	108.4	54.2	(154.5)	538	140	(399)	1,077	280	(797)
Delaware	35.4	17.7	15.1	21	140	119	41	280	239
District of Columbia	50.5	25.3	2.2	128	140	12	255	280	25
Florida	1,016.7	559.5	427.6	36	154	118	66	280	214
Georgia	504.4	313.1	121.0	106	174	67	172	280	108
Hawaii	71.6	35.8	13.9	86	140	54	171	280	108
Idaho	77.5	55.2	54.5	3	199	197	4	280	276
Illinois	768.8	384.4	264.4	44	140	96	87	280	192
Indiana	361.9	228.8	207.4	16	177	160	26	280	254
Iowa	161.6	101.4	98.9	4	175	171	7	280	273
Kansas	146.3	85.1	(22.2)	205	163	(42)	353	280	(73)
Kentucky	317.2	227.4	129.2	87	200	114	121	280	159
Louisiana	399.9	294.8	(602.7)	627	206	(421)	851	280	(572)
Maine	83.9	51.9	(49.5)	338	173	(165)	547	280	(267)
Maryland	237.2	118.6	79.7	46	140	94	92	280	188
Massachusetts	294.5	147.2	(95.0)	230	140	(90)	460	280	(180)
Michigan	597.1	333.4	29.2	142	156	14	255	280	24
Minnesota	253.6	139.3	121.6	20	154	134	36	280	244
Mississippi	296.7	234.4	114.0	113	221	107	144	280	136
Missouri	370.1	223.1	(200.6)	320	168	(152)	531	280	(251)
Montana	65.2	46.3	45.9	2	198	197	2	280	277
Nebraska	90.4	55.4	53.4	6	171	165	10	280	269
Nevada	77.4	40.4	(1.5)	152	146	(6)	290	280	(11)
New Hampshire	48.8	24.4	(167.0)	1,096	140	(956)	2,192	280	(1,913)
New Jersey	349.3	174.6	(369.5)	436	140	(296)	871	280	(591)
New Mexico	143.6	106.1	99.6	13	206	194	17	280	263
New York	1,229.2	614.6	(664.7)	291	140	(151)	582	280	(302)
North Carolina	462.7	305.0	77.3	138	184	47	209	280	71
North Dakota	40.1	29.0	28.9	0	202	202	0	280	280
Ohio	663.6	399.8	129.3	114	168	54	189	280	90
Oklahoma	260.5	181.5	165.1	18	195	177	25	280	254
Oregon	190.8	119.1	106.2	19	174	156	30	280	249
Pennsylvania	698.9	387.7	(62.3)	180	155	(25)	325	280	(45)
Rhode Island	48.0	25.7	(26.4)	304	150	(154)	566	280	(287)
South Carolina	280.6	200.0	(114.1)	313	199	(114)	439	280	(160)
South Dakota	52.1	36.6	36.6	0	196	196	0	280	280
Tennessee	404.1	273.1	(17.7)	201	189	(12)	298	280	(18)
Texas	1,418.3	914.0	(61.0)	192	180	(12)	298	280	(19)
Utah	104.5	78.6	75.3	9	211	202	12	280	268
Vermont	30.5	18.3	7.1	102	167	65	170	280	109
Virginia	345.9	172.9	107.6	53	140	87	106	280	174
Washington	242.6	133.5	(7.9)	163	154	(9)	296	280	(17)
West Virginia	164.9	125.8	45.5	136	213	77	179	280	101
Wisconsin	265.4	160.3	155.7	5	169	164	8	280	272
Wyoming	26.3	17.7	17.6	1	188	187	1	280	279

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993

current system: eighteen would receive less. The largest winners in absolute dollars are states where DSH dollars are currently low relative to the number of people below 150 percent of poverty: Florida and Illinois, and Indiana. The largest losers are Louisiana, New Jersey, New York, New Hampshire, and Missouri. Columns D and E show that Arkansas currently receives \$2 in federal DSH dollars per person below 150 percent of poverty and would receive \$208 per person under this approach. A high-income state such as New Hampshire, which currently receives \$1,096 per person below 150 percent of poverty, would receive \$140.

The main difference between relying on the number of uninsured persons as opposed to the number of people below 150 percent of poverty is that there will be greater benefits from the former to states that have a large number of uninsured relative to the number of low-income people. For example, Florida receives much higher DSH payments if it is based on the number of uninsured people because there are a large number of uninsured relative to the number below 150 percent of poverty. In contrast, New York has higher DSH payments under an approach that bases DSH payments on spending per person below 150 percent of poverty than if it is based on the number of uninsured because, relative to the number of people in poverty, New York has fewer uninsured persons.

Tables III.8 and III.9 present the same information, but use an alternative federal matching formula. This formula replaces the current measure of state per capita personal income with a measure of fiscal capacity developed by Moon and Liska (see Chapter II). Their approach uses total taxable resources, a broader measure of ability to pay that relies on a combination of gross state product as well as state per capita personal income. Their measure combines total taxable resources with the proportion of persons under 150 percent of poverty to capture state needs. Both of these measures are adjusted by a state cost of living index to capture truer measures of

Table III.8

**1993 Modified Disproportionate Share Payments
Based on Number of Uninsured Individuals by State
and Adjusted¹ FMAP Formula**

State	(A) Modified Total DSH Payment to State (millions)	(B) Modified Federal DSH Payment to State (millions)	(C) Change from Current (millions)	Federal DSH Spending per uninsured person			Federal & State DSH Spending per uninsured person		
				(D)	(E)	(F)	(G)	(H)	(I)
				Current	Modified	Difference	Current	Modified	Difference
Total	\$16,944.0	\$9,651.5	(66.9)	\$282	\$280	(2)	\$491	\$491	(0)
Alabama	349.5	236.3	(63.2)	421	332	(89)	589	491	(98)
Alaska	48.3	24.1	7.5	169	246	76	339	491	152
Arkansas	204.5	139.6	137.7	5	335	331	6	491	485
California	2,587.6	1,526.1	254.9	241	290	48	483	491	9
Colorado	196.6	98.3	27.3	177	246	68	326	491	165
Connecticut	119.2	59.6	(149.1)	860	246	(614)	1,720	491	(1,229)
Delaware	45.0	22.5	19.9	28	246	217	57	491	434
District of Columbia	55.4	27.7	4.6	204	246	41	409	491	82
Florida	1,266.7	743.0	611.1	51	288	237	93	491	398
Georgia	525.9	292.6	100.5	179	273	94	289	491	202
Hawaii	37.8	26.2	4.3	285	340	55	570	491	(79)
Idaho	83.4	51.7	51.0	4	305	301	6	491	485
Illinois	663.9	337.4	217.3	89	250	161	178	491	314
Indiana	314.1	164.7	143.3	33	258	224	53	491	438
Iowa	127.8	63.9	61.4	10	246	236	15	491	476
Kansas	131.6	65.8	(41.5)	400	246	(155)	688	491	(197)
Kentucky	220.2	137.4	39.2	219	307	87	306	491	186
Louisiana	397.1	266.0	(631.5)	1,110	329	(781)	1,506	491	(1,015)
Maine	67.9	43.6	(57.8)	733	315	(418)	1,186	491	(695)
Maryland	261.3	130.7	91.8	73	246	172	146	491	345
Massachusetts	284.9	142.5	(99.8)	418	246	(172)	835	491	(344)
Michigan	431.4	215.7	(88.5)	346	246	(101)	620	491	(129)
Minnesota	234.0	117.0	99.3	37	246	208	68	491	423
Mississippi	247.7	190.5	70.1	239	378	139	302	491	189
Missouri	330.3	177.2	(246.5)	630	263	(367)	1,046	491	(554)
Montana	58.3	38.9	38.5	3	328	325	5	491	487
Nebraska	68.3	34.2	32.1	15	246	231	24	491	467
Nevada	118.6	59.3	17.4	174	246	72	332	491	159
New Hampshire	68.6	34.3	(157.1)	1,370	246	(1,125)	2,740	491	(2,249)
New Jersey	426.7	213.3	(330.8)	626	246	(381)	1,253	491	(762)
New Mexico	159.4	116.2	109.7	20	358	338	27	491	464
New York	1,129.5	683.0	(596.3)	556	297	(259)	1,113	491	(622)
North Carolina	434.4	221.3	(6.5)	258	250	(7)	391	491	100
North Dakota	25.4	13.2	13.2	0	254	254	0	491	491
Ohio	523.7	264.0	(6.6)	254	248	(6)	421	491	70
Oklahoma	291.7	185.1	168.7	28	312	284	40	491	452
Oregon	183.3	106.6	93.8	34	286	251	55	491	436
Pennsylvania	536.9	295.0	(155.0)	412	270	(142)	742	491	(251)
Rhode Island	44.0	24.0	(28.1)	581	268	(314)	1,084	491	(592)
South Carolina	285.0	179.0	(135.2)	541	308	(233)	760	491	(268)
South Dakota	49.1	27.4	27.4	0	274	274	0	491	491
Tennessee	335.4	210.5	(80.2)	426	308	(118)	630	491	(139)
Texas	1,780.6	1,016.5	41.5	269	280	11	417	491	74
Utah	96.3	57.7	54.3	17	294	277	23	491	468
Vermont	27.8	14.9	3.7	197	263	66	328	491	163
Virginia	479.9	240.0	174.6	67	246	179	134	491	357
Washington	260.6	130.3	(11.1)	267	246	(21)	484	491	7
West Virginia	112.4	78.9	(1.4)	351	345	(6)	460	491	31
Wisconsin	188.8	94.4	89.8	12	246	234	20	491	471
Wyoming	27.1	13.5	13.5	1	246	244	2	491	489

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993

¹FMAP calculated using TTR per person under 150% of poverty instead of per capita income

Table III.9

1993 Modified Disproportionate Share Payments
Based on Number of Individuals Below 150% of Poverty by State
and Adjusted¹ FMAP Formula

State	(A) Modified Total DSH Payment to State (millions)	(B) Modified Federal to State (millions)	(C) Change from Current (millions)	Federal DSH Spending per Person Below 150% of Poverty			Federal & State DSH Spending per Person Below 150% of Poverty		
				(D) Current	(E) Modified	(F) Difference	(G) Current	(H) Modified	(I) Difference
Total	\$16,944.0	\$9,650.6	(67.8)	\$160	\$159	(1)	\$280	\$280	0
Alabama	363.2	245.5	(54.0)	231	189	(42)	323	280	(43)
Alaska	37.5	18.8	2.1	124	140	16	248	280	31
Arkansas	213.7	145.8	143.9	2	191	188	3	280	276
California	2,283.6	1,346.8	75.6	156	165	9	311	280	(32)
Colorado	188.8	94.4	23.3	105	140	35	193	280	86
Connecticut	108.4	54.2	(154.5)	538	140	(399)	1,077	280	(797)
Delaware	35.4	17.7	15.1	21	140	119	41	280	239
District of Columbia	50.5	25.3	2.2	128	140	12	255	280	25
Florida	1,016.7	596.4	464.5	36	164	128	66	280	214
Georgia	504.4	280.7	88.6	106	156	49	172	280	108
Hawaii	71.6	49.7	27.7	86	194	108	171	280	108
Idaho	77.5	48.1	47.4	3	174	171	4	280	276
Illinois	768.8	390.7	270.7	44	142	98	87	280	192
Indiana	361.9	189.8	168.4	16	147	130	26	280	254
Iowa	161.6	80.8	78.3	4	140	135	7	280	273
Kansas	146.3	73.1	(34.2)	205	140	(65)	353	280	(73)
Kentucky	317.2	198.0	99.8	87	175	88	121	280	159
Louisiana	399.9	267.8	(629.6)	627	187	(440)	851	280	(572)
Maine	33.9	53.8	(47.6)	338	179	(159)	547	280	(267)
Maryland	237.2	118.6	79.7	46	140	94	92	280	188
Massachusetts	294.5	147.2	(95.0)	230	140	(90)	460	280	(180)
Michigan	597.1	298.5	(5.7)	142	140	(3)	255	280	24
Minnesota	253.6	126.8	109.1	20	140	120	36	280	244
Mississippi	296.7	228.2	107.8	113	215	102	144	280	136
Missouri	370.1	198.6	(225.1)	320	150	(170)	531	280	(251)
Montana	65.2	43.5	43.2	2	187	185	2	280	277
Nebraska	90.4	45.2	43.2	6	140	133	10	280	269
Nevada	77.4	38.7	(3.3)	152	140	(12)	290	280	(11)
New Hampshire	48.8	24.4	(167.0)	1,096	140	(956)	2,192	280	(1,913)
New Jersey	349.3	174.6	(369.5)	436	140	(296)	871	280	(591)
New Mexico	143.6	104.7	98.2	13	204	191	17	280	263
New York	1,229.2	743.4	(536.0)	291	169	(122)	582	280	(302)
North Carolina	462.7	235.7	7.9	138	142	5	209	280	71
North Dakota	40.1	20.8	20.7	0	145	145	0	280	280
Ohio	663.6	334.5	64.0	114	141	27	189	280	90
Oklahoma	260.5	165.3	148.9	18	177	160	25	280	254
Oregon	190.8	111.0	98.2	19	163	144	30	280	249
Pennsylvania	698.9	384.1	(66.0)	180	154	(26)	325	280	(45)
Rhode Island	48.0	26.1	(26.0)	304	152	(152)	566	280	(287)
South Carolina	280.6	176.2	(137.9)	313	176	(137)	439	280	(160)
South Dakota	52.1	29.1	29.1	0	156	156	0	280	280
Tennessee	404.1	253.6	(37.1)	201	175	(26)	298	280	(18)
Texas	1,418.3	809.7	(165.3)	192	160	(33)	298	280	(19)
Utah	104.5	62.6	59.2	9	167	159	12	280	268
Vermont	30.5	16.3	5.2	102	150	48	170	280	109
Virginia	345.9	172.9	107.6	53	140	87	106	280	174
Washington	242.6	121.3	(20.1)	163	140	(23)	296	280	(17)
West Virginia	164.9	115.7	35.4	136	196	60	179	280	101
Wisconsin	265.4	132.7	128.1	5	140	135	8	280	272
Wyoming	26.3	13.2	13.1	1	140	139	1	280	279

Source: HCFA Form 64 and Urban Institute's TRIM2 Model based on Three Year Merged March CPS, 1991, 1992, and 1993

FMAP calculated using TTR per person under 150% of poverty instead of per capita income

poverty and need. The result is implicitly a measure of relative fiscal capacity per poor and near-poor state resident. Table III.8 distributes DSH dollars based on the number of uninsured individuals in the state using this alternative federal matching formula. Table III.9 distributes DSH payments based on the number of people below 150 percent of poverty using the same alternative formula.

Total payments (federal and state) in the aggregate as well as per uninsured person or per person below 150 percent of poverty are the same as with the current FMAP. However, the distribution of federal payments among states is somewhat different. States such as California, Florida, and Illinois have higher federal matching percentages because of the relatively large number of people in poverty. For example, comparing Table III.8 with Table III.6, we show that the adjusted FMAP formula would increase federal DSH payments in California by about \$232 million, New York by \$118 million, and Florida by \$46 million. A large number of states would see their federal matching payments decline, either because their ability to pay based on total taxable resources exceeds their ability to pay on a per capita personal income basis, or because cost of living adjusted poverty counts reduce the estimated number in poverty, thus reducing federal matching payments. Those with lower DSH payments include a large number of states in the mid-west, south, and mountain states. In essence, the adjusted federal matching formula adjusts for the fact that many of these states are better off once a cost-of-living adjustment is used to measure true ability to pay and to estimate the number of people in poverty.

Essentially, the same results occur when we compare Table III.9 to Table III.7. These tables would both distribute disproportionate share payments based on the number of people below 150 percent of poverty. The difference between the two tables is the adjusted federal matching formula. States such as California, New York, and Florida would gain financially. A large number of smaller

states in the south, mid-west, and mountain states would receive somewhat less in disproportionate share payments.

Conclusions

This chapter has demonstrated that the current distribution of federal DSH payments is inequitable by many definitions. Current legislation establishes a national target for DSH payments equal to 12 percent of Medicaid spending. It would cap DSH payments in high-DSH states and allow low-DSH states to "catch up," that is, gradually allow DSH payments to increase to 12 percent of Medicaid expenditures. But as we have shown, the distribution of DSH funds would remain inequitable. That is, DSH spending would be related to current overall Medicaid expenditures rather than the number of uninsured persons or relative to any other defensible measure of need.

We have shown that there are alternative ways of distributing DSH dollars that would achieve greater equity. But such policies would result in large financial losses to those states that have aggressively used this mechanism in recent years. It can be argued that it would be very disruptive to sharply reduce DSH payments in those states. But the alternative argument is that it is highly unfair to use federal tax revenues received from residents of over 30 states to fund high levels of DSH payments in the remaining states.

The highly skewed distribution of these dollars argues that the unfairness in the current system should be addressed. This issue is particularly important given that it is unlikely, in the near term, that the nation will rely on subsidies to low-income people as the major approach to increasing insurance coverage of low-income people. Coverage of low-income Americans seems likely to remain in the hands of state Medicaid programs in the near future. For example, in recent years many states have used Section 1115 waiver programs to expand coverage of low-income individuals. Many of these states are using DSH payments to help finance these expansions of

coverage. States request that the federal government allow them to use DSH payments, not to distribute them directly to hospitals that serve the poor, but to allow them to purchase coverage in managed care plans.

More equitable distribution of DSH payments would allow a broader array of states to finance coverage for more individuals. Or alternatively, it would permit more states to directly support hospitals that provide care to the poor. Clearly, it would be necessary to strengthen current policies about the use of these funds, restricting their use to hospitals that serve a high proportion of low-income individuals or that demonstrate high levels of bad debt and charity care. But the central argument of this chapter is that a redistribution of these funds among states would not only be equitable but would far better target federal spending on those in need.

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[OBRA 1981] Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35), Section 2173(a)(1).

[OBRA 1986] Omnibus Budget Reconciliation Act of 1986 (Public Law 99-509), Section 1902(h).

CHAPTER IV: MEDICAID MAINTENANCE OF EFFORT: LESSONS LEARNED FROM THE HEALTH CARE REFORM DEBATE¹

Introduction

The problems with the current distribution of state spending and federal contributions toward state Medicaid programs have important implications for the types of broad health care system reform discussed during 1993/1994, and those proposals likely to receive renewed attention in the coming years. Although recent proposals varied considerably in how they treated the Medicaid program, most included some provision for what was referred to as state Maintenance of Effort (MOE). Under MOE, states would be required to make annual lump sum payments to the federal government; these payments would be used as partial payment of the federal cost of financing new health care programs. These MOE payments would replace the states' share (or parts of their share) of financing the discontinued portion of the current Medicaid program. The level of MOE payments were, in general, based in some way upon current levels of state spending on their Medicaid programs.

Health care reform proposals (both those brought forward as formal bills and those in more informal stages of development) have suggested a range of options for handling the Medicaid program. At one extreme, some proposals would leave the Medicaid program as it is today—a separate program for categorically eligible individuals and families. At the opposite end of the spectrum are proposals to fully integrate the acute care portion of the Medicaid program (both the cash and non-cash beneficiaries) into a new program designed to expand insurance coverage to groups currently ineligible for public insurance. All proposals which integrate or eliminate a portion

¹ This chapter was written by Linda J. Blumberg.

of the current Medicaid program made provisions for some type of state "maintenance of effort" requirement.

Perpetuating the current levels of state Medicaid program spending through time would imply that the relative spending levels in the current system are appropriate. Given the significant research indicating these levels are not necessarily optimal from either an ability to pay or need perspective, the MOE concept deserves further scrutiny. This chapter explores the ways in which MOE requirements are structured, what the potential options are for structuring such a requirement, and particularly, what the implications would be of moving to a MOE requirement based upon health care needs or ability to pay.

The General Concept of Maintenance of Effort

Maintenance of effort is a health care reform financing tool. As states' financing burdens resulting from their Medicaid programs are decreased due to broader system reforms, MOE requires states to use their savings to make payments towards the new program. For example, if all low income persons (whether or not they are currently eligible for Medicaid) were made eligible for private health insurance vouchers, a significant portion of the Medicaid program would no longer be necessary. As a consequence of the savings to the state that would occur, a MOE policy would require each state to make payments toward the costs of the new low income voucher program. MOE requirements reduce the federal burden of financing new health care programs and ensure that spending is not limited to just what the federal government contributes. There is also some thought that if states are obligated to maintain a financial interest in the new programs that they might also play a role in limiting administrative costs and other spending over time.

The appropriate way to determine the level and rate of increase in these state payments is, however, a matter of some debate. Requiring states to continue at their current levels of program

spending, for example, "punishes" those states which have voluntarily instituted generous programs or those with a disproportionate share of eligible individuals, while it rewards those states with modest programs or less needy populations.

Maintenance of Effort Under the President's Health Security Act

The MOE structure in the Clinton Administration's Health Security Act (HSA) is instructive as an example of how MOE can be configured and what the issues are in making these types of choices. Under the President's bill, the Medicaid acute care program was divided between those eligibles who receive cash assistance through AFDC or SSI (the group referred to henceforth as the Medicaid "cash") and those who receive their eligibility through the medically needy program or through pregnant women and children expansions (the group to be referred to as the Medicaid "non-cash").

The Medicaid program for the cash recipients was not discontinued under the HSA; it would change form, however, allowing the beneficiaries to enroll in private health plans. Cash beneficiaries were still to be identified as Medicaid recipients, and as a consequence, they were not required to make any premium payment on their own behalf for their health coverage. The states were required to make fixed per capita premium payments to the regional alliances (health insurance purchasing cooperatives) on behalf of each Medicaid cash recipient. These payments were to be based upon current per capita spending by states on behalf of this group for those services covered by the comprehensive benefit package; payment levels were to be trended forward by health care inflation. The federal government would also continue to make payments on behalf of the Medicaid cash, based upon current spending and the FMAP formula. The federal share plus the state share of the per capita payments were to constitute payment in full into the new system on behalf of the

AFDC and SSI populations. Although the beneficiaries were not required to make any premium contributions for themselves, they were to be subject to some nominal cost sharing.²

The capitated premium policy for the cash recipients (in conjunction with the premium caps) was a design intended to prevent providers from receiving an average payment rate increase. Such an average payment increase might have occurred if the market were allowed to determine the premium for current Medicaid beneficiaries. Current Medicaid payments are low relative to private payments. Many analysts believe that providers compensate for this underpayment by increasing their charges to private paying patients ("cost-shifting"). If private insurance plans were to charge Medicaid recipients (or the government on their behalf) entering the private insurance market at the current private rates, they would not be taking into account that current private rates likely include an extra load for the Medicaid cost-shift. And there would no longer be a rationale for a Medicaid cost shift if Medicaid were reimbursing at private rates. Insurers receiving current private rates for Medicaid patients would, in essence, be receiving an increase in their current average payment rates; this increase could translate into a windfall for either insurers or providers until the market responded and reduced the private rates. By proposing a policy that would continue to compensate providers on the basis of current public payment rates for at least a portion of the Medicaid population, such windfalls would presumably be prevented. This payment method was limited to the AFDC/SSI population since that group is fairly easy to identify through time due to their cash recipient status.

² For cash recipients enrolled in a low cost sharing (HMO type) plan, the copayment amount would be reduced to 20 percent of the full copayment amount (the full amount was to be \$10 in 1994 dollars for an office visit, for example). If the capacity of low cost sharing plans in an area was such that some AFDC or SSI families were compelled to enroll in a high cost sharing (fee-for-service type) plan, those families would have their cost-sharing obligations reduced to the low cost sharing levels as well.

The non-cash population was treated differently. For all practical purposes, the non-cash population was to be treated the same as other low income families not receiving Medicaid. These Medicaid beneficiaries were combined with the broader low income population for practical reasons. Through time, it would be very difficult to identify individuals/families that would have been non-cash Medicaid enrollees. Every low income family would have been guaranteed subsidized insurance coverage regardless of any hypothetical Medicaid eligibility; consequently, there would have been no strong incentive for a family to identify themselves as a non-cash unit. Due to the perceived inability to track this population through time, it was decided to treat them in the same manner as the broader population, allowing them to apply for the general low-income premium subsidies and cost-sharing reductions.

The acute care non-cash Medicaid program was, therefore, effectively eliminated. The MOE requirements of the HSA stemmed from this aspect of the policy. In the first year of a state's implementation of the new program,³ it would be required to pay an amount equal to its total fiscal year 1993 payments for the non-cash Medicaid services that were included in the HSA comprehensive benefit package, updated by, essentially, baseline national average growth between FY 1993 and the date of that state's implementation. Thus, again, the FMAP played a role in the proposal by influencing the level of each state's MOE payment. In subsequent years, a state would pay its first year amount updated by health care inflation factors for the intervening years. The health care inflation factors were defined in the legislation through the year 2000, and they were quite tight.⁴

³ States were to phase into the new program between 1996 and 1998.

⁴ The percentage increase in the consumer price index (CPI) plus: 1.5 percentage points in 1996, 1.0 percentage points in 1997, .5 percentage points in 1998, and 0 percentage points in 1999 and 2000.

The HSA also required state MOE for AFDC and SSI children's services included in the Medicaid benefit package but which were excluded from the HSA comprehensive benefit package.⁵ The MOE for these "wrap-around" benefits was an outgrowth of a new federal program provided for under the HSA that would cover qualifying⁶ children for these benefits, thereby alleviating another part of the state's Medicaid burden for AFDC, SSI and non-cash children.

In addition to MOE payments for basic acute care for the non-cash adults and children, and wrap-around benefits for the cash assistance children, states were also required to pay MOE based upon a portion of their current system disproportionate share hospitals (DSH) spending. The portion of DSH spending falling under the MOE requirement was that "attributable" to the non-cash population.⁷ This portion of DSH was equal to payments made under section 1923 of the Social Security Act in fiscal 1993 multiplied by the proportion of payments for medical assistance for hospital services under the state Medicaid plan attributable to non-cash assistance adults and children for the same year.

Consider California as an example of how this requirement would work. In fiscal year (FY) 1993, California raised and spent \$1.033 billion dollars in DSH payments (Ku and Coughlin, 1994).

⁵ Medicaid long term care benefits were excluded, however.

⁶ Qualifying children were defined to be:

- under 19 years of age;
- an AFDC or SSI recipient; or
- eligible to receive medical assistance under the state's plan under section 1902(a)(10)(C) of the Social Security Act; or
- under 1 year of age and family income less than or equal to 133% of poverty (or in the case of a state that established an income level greater than 133% of poverty in that age group as of October 1, 1993, an income level which is a percentage of such level not greater than 185%); or
- age 1 up to age 6 with family income less than or equal to 133% of poverty ; or
- born after September 30, 1983, is at least 6 years of age and has family income less than or equal to 100% of poverty.

⁷ Technically, DSH spending is not attributable to the non-cash recipients. The intent of the DSH program was to compensate those hospitals serving a disproportionate share of uninsured individuals.

In FY 1993, \$1.25 billion were attributable to spending (state plus federal) on medical assistance for hospital services for non-cash adults and children, or approximately 33 percent of total medical assistance for hospital services in FY 1993 in California. Under the HSA, the DSH MOE requirement for California would have been $\$1.033 \text{ billion} * 33\% = \$341 \text{ million}$.

Although the HSA based MOE payments on current spending in the Medicaid program, which implicitly reflects current program matching rates, there was a provision for modifying those payments in a budget neutral manner. The bill stated that the National Health Board would, from time to time, review the appropriateness of the state payment levels required. The Board could report to Congress on adjustments for assuring an equitable distribution of state payments, taking into account each state's revenue base. The Congress was not to be bound by the recommendations of the Board.

Why did the Administration opt to design the MOE requirements in this fashion? First, the states had continued obligations to make per capita premium payments on behalf of the cash population. Since the Medicaid cash program was still in existence (although beneficiaries would be enrolled in private plans) no MOE could be expected on their behalf. This situation was desirable from the financing perspective because it kept payment rates for the cash recipients low (at public sector payment rates instead of private sector payment rates), avoiding a potential payment windfall to providers. And since the insurance coverage received by these beneficiaries would be the same as that received by others choosing the same health plan,⁸ individuals were insulated from any overt discrimination. The Administration proposal included provisions that both controlled the level and

⁸ The regional alliances would receive premium payments from employers, households, state governments (on behalf of Medicaid recipients), and the federal government (on behalf of Medicaid recipients and others eligible for premium subsidies). The aggregate premium collections would be "blended" together and paid out on a risk adjusted basis to health plans, based upon their enrollment. Health plans would therefore be paid an average premium that would reflect the overall risk profile of its enrollees.

rate of increase in private premiums to prevent any additional cost shifting—and these provisions proved to be among the most controversial in the plan.

Second, the HSA's guarantee of universal coverage allowed for the elimination of the DSH program. DSH dollars, intended to alleviate the financial pressures on providers from caring for a substantial uninsured population, would not be necessary in a world with no uninsured.⁹ Requiring only a partial MOE on state DSH allowed the states to keep some of the savings attributable to the end of the DSH program while taking some of the savings to offset the federal costs of subsidies.

Justifying even partial MOE on DSH is difficult, however. Participation in the DSH program is very uneven across states (see Chapter III), and the use by some states of “creative” financing mechanisms for paying the state portion of DSH complicates the issue further. Many high “DSH States” used provider taxes and donations as revenue raising tools. States would tax hospitals or have the providers make donations to the state. Medicaid reimbursement rates were then increased. The funds raised in this manner were used to receive federal DSH matching payments. Through the increased reimbursement rates, the taxes and donations were effectively passed back to the providers (Ku and Coughlin, 1994 and Holahan, in Chapter III).

A hypothetical example (taken from Ku and Coughlin, 1994) can clarify this flow of funds. In State X, hospitals pay \$50 million in provider taxes to the state. The next step is that the state pays its hospitals, in aggregate, \$60 million in DSH payments. In state X the FMAP is 50 percent, so the state receives \$30 million in federal DSH matching funds. The state has therefore received \$80 million in revenue (\$50 million from hospitals and \$30 million from the federal government)

⁹ Some would argue, however, that a role of DSH is help to compensate providers for low Medicaid payments rates, not only for care for the uninsured. A continuation of DSH dollars attributable to the cash population might be justified by that rationale with respect to the HSA, given that the premium payments on behalf of the cash population would have been based upon current public sector payment rates.

and paid out \$60 million in DSH payments, for a net state gain of \$20 million. This mechanism shifts more costs of the Medicaid program to the federal government, effectively increasing the state's federal matching rate.

In many cases when these mechanisms were used, no real revenues had been raised by the states; provider dollars were simply used to leverage more federal contributions to the program. Consequently, creating a MOE requirement based on state DSH "spending" would require states to increase taxes or raise revenue in some other manner in order to satisfy the mandate.

Third, the rates of increase proscribed in the bill for the MOE payments were quite low, relative to historical trends. After the first year of state implementation, the MOE requirements were to grow by the following formula:

$$(1+h) * (1+pop_{<65})$$

where h is the general health care inflation factor for the year, and $pop_{<65}$ is the percentage increase in the US population of individuals who are under 65 years of age for the year. Given the tightness of the HSA premium caps and the policy that rates of increase were tied to the growth in the size of the general population under age 65—not historical Medicaid program population growth which is much higher—any state trending their current spending forward by those allowed rates of increase could expect significant savings over time.

The growth in the number of adult non-cash acute care Medicaid beneficiaries between 1992 and 1993 was approximately 10%, and the growth in the number of non-cash acute care Medicaid children was close to 18.8%.¹⁰ Meanwhile, the general population under age 65 grew by only about 1 percent during that same period. Per beneficiary spending on these non-cash beneficiaries grew by

¹⁰ Calculations from Holahan, Liška, and Obermaier (1994), table 3.

-8.2% to 5.0%, depending upon the enrollment group (adults versus children, poverty related or other non-cash). From 1992 to 1993, total Medicaid spending increased by over 13% for acute care for the non-cash adults and children group as a whole, largely due to growth in the number of beneficiaries.¹¹ However, if under HSA-like MOE requirements, spending had been constrained,¹² then the increase in state spending between 1992 and 1993 might have been approximately 6% instead of 13%. Expected savings of that magnitude and larger (the Medicaid baseline used during the health reform effort was actually higher than the actual experience in 1993) made MOE requirements easier to accept from the perspective of state government.

Fourth, relying, at least in the short run, upon the current distribution of state spending avoided a tremendous political controversy. Redistributing relative payments across states as a result of moving to an index (such as the adjusted Total Taxable Resources and poverty-based index discussed in Chapter II) that would potentially be more equitable would have created significant winners and losers among the state governments. Given the level of debate over virtually every provision of the HSA, avoiding another obviously controversial provision was understandable.

Finally, it should be remembered that the objective of using a MOE policy of any kind in the HSA was almost purely a mechanism to avoid broad-based taxes or other unpopular financing tools. The Administration negotiated at length with the National Governors' Association (NGA), until they were able to reach a delicate balance between what the NGA would accept and the Administration's desire to maximize sources of revenue for the new program. The bottom line from an equity standpoint, however, is that the level of required state MOE payments, and as a consequence the

¹¹ Calculations from Holahan, Liska, and Obermaier (1994), tables 3 and 4.

¹² Population growth = 1%, CPI growth = 3% (CBO estimate), and health care inflation add-on = 1.5% are the factors used in this example.

magnitude of savings that might accrue to each state under the HSA, were based upon current spending patterns under Medicaid. Current total spending patterns are at least partially an outgrowth of the Medicaid FMAP formula,¹³ as the financial incentives inherent in a high or low federal matching rate are bound to affect state allocation decisions over time. This FMAP formula has been shown to be inequitable from the perspective of state ability to pay and health care needs. Relying upon current levels of voluntary spending for setting future required payments also penalizes those states who have chosen to provide generous coverage in the past.

A related issue that arose with regard to the Health Security Act (as well as with other proposals) was the handling of residual Medicaid programs. By residual Medicaid programs, we mean those benefits and services that are currently subsumed in the Medicaid program and that would be unaffected by the proposed reforms. Under the HSA, institutional long term care services and all services attributable to the elderly fell into the residual category. The HSA would have used the current FMAP formula to determine the federal share of dollars for the residual programs in the same manner as does the current system.

The narrower focus of the residual Medicaid programs would, however, suggest avenues for tailoring a formula to the particular population served. For example, a formula which took into account both fiscal capacity and a measure of the percentage of a state's population comprised of low income elderly would presumably be a better relative measure of state need than a fiscal capacity measure alone. One alternative FMAP might look as follows:

$$federal\ share = 1 - \left(TTR * \frac{\% \text{ of nat'l pop. that is } \geq 65 \text{ \& } \leq 150\% \text{ poverty}}{\% \text{ of state pop. that is } \geq 65 \text{ \& } \leq 150\% \text{ poverty}} * .45 \right)$$

¹³ Examples of other factors are: state health care needs, socio-economic characteristics of the state, and the state political environment.

where TTR is the Treasury Department Total Taxable Resources measure of fiscal capacity (substituting for the relative state per capita personal income measure in the current FMAP formula). Both TTR and the poverty levels could be adjusted for state cost of living differences. For states with equal TTR measures, this formula would provide a larger federal matching rate for the state with a larger population share of elderly, low income persons.

Maintenance of Effort Under Alternative Health Care Reform Proposals

Health care reform proposals that are most likely to emerge/re-emerge in the next Congress may include MOE provisions that differ from those contained in the Health Security Act. The structure of such MOE provisions could depend upon a number of factors, most prominently, the extent of Medicaid integration, the level of insurance coverage anticipated, and the groups of beneficiaries eligible for any new programs.

Integration of the Medicaid Program. The level of Medicaid integration is the most important factor in determining the make-up of a MOE policy. If Medicaid is maintained in its present form as a separate entity, regardless of any other system reforms being implemented, no MOE can be expected from states. Under a complete integration of the acute care portion of the Medicaid program into a new, broader program, MOE might be expected on behalf of both the

cash¹⁴ and the non-cash spending for basic services. Both the Mitchell¹⁵ and the Dole¹⁶ bills are examples of this type of more comprehensive Medicaid integration.

Implications of Residual Uninsured. The extent to which any proposed reform is expected to affect the number of uninsured people will also be significant from a MOE design standpoint. As was noted earlier, a universal coverage system obviates the need for the DSH program and, consequently, some MOE for DSH might be required. However, in the context of incremental reforms, the extent to which coverage is expanded should affect the level of DSH MOE anticipated. If DSH funding is phased down through the course of a new program as coverage increases, the DSH MOE could be designed to expand on a similar schedule.

"Kids First". If, however, broad-based reforms are rejected in favor of something more narrow such as a "kids first" policy, such a plan may or may not be amenable to a MOE requirement. A kids policy could be run through the Medicaid program, a Medicare-type program, or through the private sector. The most likely scenario, covering children through Medicaid expansions, would imply that no MOE dollars would be available for financing the new coverage. Financing for all new eligibles would have to result from new sources. Developing a Medicare-type program for children could mean the availability of some MOE dollars, depending upon whether or not current Medicaid eligibles were integrated into the new program. The same would be true for a program that relied upon contracting with private sector plans for children's coverage.

¹⁴ In reference to integration issues, "cash" often meant AFDC in the proposals. The SSI population were often excluded from integration since the per capita cost of this group was high enough to substantially affect the community rated premiums in the broader pool.

¹⁵ The Mitchell Bill did allow states the option of making capitated payments on behalf of SSI recipients, however. All AFDC and non-cash were to be integrated into the low income subsidy program.

¹⁶ All AFDC and non-cash were to be integrated into certified health plans and eligible for 100% subsidy, subject to the availability of funding. Integration of the SSI population was limited, however, to 15% in each of the first 3 years, and 10% each year thereafter. The SSI premium rate would be negotiated.

Given that, on average, the cost of providing care to children is significantly below that of providing care to adults, significant decreases in the DSH program would likely not be included in a kids first policy, regardless of the construction, thus financing of this approach through DSH MOE would be unlikely.

State-Only Programs. Current state only spending is another realm that has been considered as a potential opportunity for generating MOE dollars. Some states have medical assistance programs and services which supplement Medicaid eligibility and that are financed solely by state dollars. Would it be appropriate to require maintenance of effort in a situation where a new federal program supplants the need for a state-only program? Although such a new federal program would generate savings to the state, requiring MOE on those dollars would be tantamount to punishing generous states and rewarding non-generous ones. Such a move would be unlikely to have much political support. On the other hand, to the extent that some states moved to include such "state-only" programs in their Medicaid base, a Medicaid-only MOE could also be viewed as unfair.

Alternatives to the FMAP. Policy choices leading to a re-allocation of financing burdens across states are an extremely difficult political avenue to take. One should bear in mind, however, that maintaining the current FMAP structure was also opposed by a very vocal and powerful contingent during the 1993/1994 debate. The state of New York, for example, battled ardently to have any future payment requirements based upon a formula that would favor New York more than the does the current FMAP. Substantively, restructuring payments based upon ability to pay could substantially strengthen the long run financing viability of new broad-based health insurance programs. In a political environment that lends itself less to universal coverage options and more to incremental reforms, it is unlikely that any strong cost containment measures will be enacted in the near term. This lack of constraints will place continued pressure on states, implying a greater

importance for developing a MOE plan that relies upon improved measures of ability to pay and need.¹⁷

Although the evidence seems compelling for altering the current FMAP for purposes of calculating a more appropriate MOE, some non-trivial problems would be likely to arise. The most obvious problem is political. Policies that would create winners and losers also create opposition that might be strong enough to prevent passage. A related issue is the interplay between MOE structure and cost containment. A reform policy that includes a strong cost containment strategy has a better chance of generating longer term savings for a majority of states, regardless of the manner in which state MOE contributions are calculated. A state that would experience an increased requirement under an ability to pay formula might find that tight increases in the allowed rates of spending growth, for example, would generate state savings relative to the baseline over a number of years. If no effective cost containment strategy were in place, however, a change in the formula might simply translate into long run cost increases relative to the baseline.

It is also important to keep in mind that the current Medicaid program is a voluntary one, even though every state currently participates. A new federal program which would rely upon state MOE dollars to finance care for a broader group would seem to require mandatory state participation. The fundamental change in the nature of the state/federal partnership from a voluntary to a mandatory one, could, in and of itself, generate resistance, particularly when long run savings relative to the baseline are not assured. The notion of mandating state payments for use in federally controlled programs is also contrary to the philosophy behind the development of the

¹⁷ Various types of "swap" plans can also be considered a form of MOE. In the case of the Medicare Catastrophic legislation, coverage expansions for children and Qualified Medicare Beneficiaries (QMBs) were imposed upon states in exchange for lessened burdens on the Medicaid program resulting from the proposed Medicare expansions. Other swap proposals under consideration include federalizing the entire Medicaid program in exchange for states assuming the financing responsibilities for AFDC, Food Stamps, and the WIC nutritional program. Examining the implications of swap proposals is beyond the scope of this work, however.

FMAP. The FMAP was looked to as an incentive for state participation, where overall spending levels could be controlled by the states, not by the federal government. Some consideration might be given to linking, in some way, state cooperation to the availability of subsidies for state residents, allowing for the continuation of a voluntary state/federal relationship.

Ability to Pay/Needs Based Formula Implementation Issues

As mentioned earlier, substantial evidence would support a move from the current Medicaid FMAP to a financing schedule based upon broader measures of state ability to pay and the health care needs of its residents. One such formula, is discussed in Chapter II. The authors propose relying upon an index that is a combination of the Total Taxable Resources (TTR) measure (developed by the Department of Treasury) and a measure of the percentage of the state population under 150 percent of poverty, adjusting TTR and poverty levels for state cost of living differentials. Their index formula is structured as follows:

$$index_i = \left(\frac{TTR_i}{pop_{\leq 150\%,i}} \div \frac{TTR_N}{pop_{\leq 150\%,N}} \right) * 100$$

where I signifies the state and $pop_{\leq 150\%}$ is the population under 150 percent of poverty, and N represents a national total. The TTR measure provides a relative per capita ability to pay measure for each state, and the poverty measure is an indicator of relative state need as well as an additional measure of ability to pay. Such an index can then be used to determine the dollar amount of required payments or can be used to construct an alternative FMAP.

States facing an increase in their required payments would undoubtedly desire a transition period during which their revenue raising plans could be revised. Such changes would necessitate state legislative action which could be quite time consuming. Additionally, a transition period of

interim payments of increasing amounts which leads up to the final amount seems advisable for states experiencing significant increases, particularly so that the economy of a specific state would not be shocked by sharp changes in taxes or other revenue raising mechanisms. This in turn would require a phasing-in of eligibility for subsidies in order to guarantee sufficient financing in the early years of the program.

Relevant issues/questions in designing a MOE policy include:

- Should state payments be based upon the index and a target dollar amount, without regard to the current distribution of spending, or should the index be converted to a matching formula and be used in conjunction with current spending information?
- How should changes over time in relative economic/health status be taken into account in a MOE requirement? i.e., how should obligations be updated, and how often?
- Is budget neutrality required of the states in aggregate under MOE? If yes, might the contributions levels faced by some states be so large relative to current spending to make the payments proscribed infeasible?
- How could the MOE payment amounts be enforced? Should they be enforced, or should states be able to opt out of the new program?
- Could/should MOE payments be used as a transitional financing mechanism, to be replaced by federal financing sources over time?

Determining the Payment Requirements. From an analytical perspective, it seems most appropriate to base future steady-state state payment obligations upon a methodology that is not confounded by an inequitable historical program precedent. Using a broader measure of state ability to pay, such as the TTR/poverty rate formula shown earlier, state obligations could be determined by setting a total dollar amount to be required of states, and dividing that total according to each state's relative ability to contribute. Though a seemingly appropriate approach from an equity standpoint, such a policy can lead to large changes in payment obligations relative to current state Medicaid

spending. Such substantial movements might be impractical even when allowing for a significant phase-in period.

The following scenario is one example of how the distribution of state payments might be calculated in a manner independent of current spending decisions. In this example, the legislation requires budget neutrality, i.e., total state payments for the new program (*reform*) has to equal the current total state Medicaid spending for acute care for the non-elderly, non-SSI population (*current*).¹⁸ Here, we use the total of this figure for fiscal year 1993, \$14.5 billion.¹⁹ Consequently, the following should be true:

$$\sum_i current_i = \sum_i reform_i = \$14.5b$$

where *I* is a state or the District of Columbia. Substituting for

$$\sum_i reform_i$$

we get

$$\sum_{i=1}^{51} \left[index_i * \frac{pop_i}{pop_N} * CF \right] = \$14.5b$$

¹⁸ MOE, as mentioned earlier, is first and foremost a financing tool which reduces the amount of new revenues that must be raised by the federal government to fund a new health care program. During the 1993/1994 debate, any discussion of altering the current FMAP formula for these purposes was under the constraint of budget neutrality—decreasing the payment obligation of one state would necessarily imply an increased obligation to other state(s). Such a constraint is not necessary, of course, but relaxing it implies increasing the federal funding obligations. In fact, as will become evident from the following analysis, it may not be reasonable to expect aggregate budget neutrality under a system of state-specific requirements.

¹⁹ Urban Institute calculations based on HCFA 2082 and 64 data. Total excludes state of Arizona spending.

where *index* is the value of an index based upon state ability to pay and need per capita for each state,²⁰ *CF* is a fixed dollar conversion factor, and *pop* signifies population, with *I* representing the particular state and *N* the national total. The resulting conversion factor would then be equal to

$$CF = \frac{\$14.5b * pop_N}{\sum_i index_i * pop_i}$$

Using the index developed by Moon and Liska in Chapter II, the conversion factor is calculated as 139.3 million.²¹ Such a formula, which ignores the current distribution of spending across states, but maintains the current aggregate level of spending (i.e., is budget neutral from the perspective of the federal government) and distributes it across states according to ability to pay and need, would lead to large percentage changes in the levels of payments required of many states for those discontinued Medicaid services (see Table IV.1, column D).

Twenty-six states would face increases in state spending for the discontinued services of 25 percent or more, with 6 of those states experiencing increases of over 90 percent. Of the 34 states facing any increase, only 2 (Kentucky and Mississippi) had increases of less than 10 percent. Only sixteen states would achieve savings (reductions in state spending) relative to current spending as a result of this formula. Although many states would face large percentage increases in Medicaid

²⁰ In general, a high index value (over 100) indicates a state with a greater ability than average to contribute funds to its own health care programs. A state with a low index value is one that needs more assistance than average from the federal government in the financing of health programs. A simple index based only upon ability to pay, for example, would be greater than 100 if the state had a higher than average ability to pay and would be less than 100 if the state had a lower than average ability to pay. Including health care need in the index would have the following type of effect: A higher than average ability to pay state which also had higher than average health care needs would have a lower value of the index than in the simple (ability to pay only) case. A higher than average ability to pay state which had lower than average health care needs would have a higher value of the index than in the simple case. See Chapter II for a more complete discussion of index configuration options.

²¹ See appendix for details of this calculation.

spending as a result of reform of this type, these changes might be perceived as modest relative to the total revenue raised by states. Column E in Table IV.1 expresses the change in state payment as a percentage of the state's total non-federal revenues, in order to assess the potential impact on a state's own tax system. Of the 33 "losing" states for which data on revenues were available, 16 would face payment increases of less than 1% of state-raised revenues. The maximum increase relative to current state revenues would be 3.0% for New Hampshire; the next largest impact is 2.3% for Wisconsin. In total, only 6 states would have faced increases of 2% or more of non federal revenues.

There is no experience with changes of this magnitude in the Medicaid program. Although the increases relative to total state revenues are fairly modest, a reasonably long phase-in period of 5 to 10 years may be required. One reason why such dramatic percentage changes in Medicaid payments result from the move to the TTR based index is that the boundaries placed upon matching rates in the Medicaid system (no state must pay more than 50 percent and no state can pay less than 17 percent) are eliminated. Consequently, the allowed variation in requirements across states is much larger. As discussed in Blumberg, Holahan, and Moon (1993) such boundaries are quite arbitrary; however, we might consider retaining them as a mechanism for

Table IV.1

**EFFECT OF A TTR/POVERTY BASED INDEX ON STATE PAYMENT REQUIREMENTS
(NO CONSTRAINTS)**

State	(A) Current state spending ¹ (in millions \$)	(B) Index based upon TTR and percent < 150% of poverty ²	(C) State spending based upon (B), no constraints (in millions \$)	(D) Percentage change from (A) to (C)	(E) Change as a percentage of total nonfederal revenues
National Total	14,542.3	100.0	14,542.3	0.0%	0.0%
Alabama	98.7	72.0	165.1	67.2%	1.6%
Alaska	67.9	127.6	41.6	-38.8%	-0.7%
Arkansas	67.3	70.5	93.6	39.0%	0.6%
California	2169.9	91.2	1,560.9	-28.1%	-1.2%
Colorado	154.3	127.0	243.8	58.0%	1.8%
Connecticut	203.0	205.9	374.2	84.3%	2.2%
Delaware	38.0	144.8	55.4	45.9%	0.8%
District of Columbia	100.8	144.2	46.8	-53.6%	n/a
Florida	712.0	91.9	686.5	-3.6%	-0.1%
Georgia	385.4	98.6	370.0	-4.0%	-0.2%
Hawaii	68.1	68.2	43.7	-35.9%	-0.5%
Idaho	35.8	84.3	49.8	39.2%	0.9%
Illinois	867.5	109.3	703.5	-18.9%	-0.9%
Indiana	356.9	105.7	331.5	-7.1%	-0.3%
Iowa	110.3	132.0	205.0	85.8%	1.5%
Kansas	93.0	130.2	181.6	95.2%	2.0%
Kentucky	166.5	83.5	173.7	4.3%	0.1%
Louisiana	225.0	73.4	174.1	-22.6%	-0.6%
Maine	69.4	79.7	54.6	-21.3%	-0.6%
Maryland	335.4	157.2	428.4	27.7%	1.0%
Massachusetts	430.8	119.0	395.4	-8.2%	-0.3%
Michigan	520.6	112.5	588.3	13.0%	0.5%
Minnesota	187.2	137.3	340.1	81.7%	1.6%
Mississippi	73.7	51.3	74.4	0.9%	0.0%
Missouri	192.0	103.0	296.4	54.3%	1.5%
Montana	25.5	73.9	33.7	31.8%	0.5%
Nebraska	67.3	137.1	121.6	80.8%	1.9%
Nevada	56.7	120.2	89.0	57.0%	n/a
New Hampshire	45.3	139.7	86.4	90.6%	3.0%
New Jersey	507.2	137.1	594.2	17.2%	0.5%
New Mexico	54.2	60.3	52.9	-2.6%	n/a
New York	2187.8	87.8	881.6	-59.7%	-3.5%
North Carolina	356.0	109.0	413.1	16.0%	0.5%
North Dakota	18.8	107.2	37.7	100.3%	1.7%
Ohio	603.2	110.2	673.2	11.6%	0.4%
Oklahoma	113.7	81.2	144.3	27.0%	0.6%
Oregon	116.3	92.9	153.1	31.7%	0.5%
Pennsylvania	444.9	100.1	665.5	49.6%	1.1%
Rhode Island	63.9	101.2	56.2	-12.1%	-0.4%
South Carolina	126.0	82.7	165.1	31.0%	0.6%
South Dakota	19.2	98.2	38.6	100.4%	2.0%
Tennessee	267.2	82.7	230.5	-13.7%	-0.6%
Texas	839.3	95.4	934.6	11.4%	0.4%
Utah	54.0	89.1	89.4	65.6%	1.2%
Vermont	26.6	103.3	32.7	23.1%	0.7%
Virginia	262.4	141.8	502.4	91.5%	2.1%
Washington	301.5	137.8	392.9	30.3%	0.8%
West Virginia	105.6	66.2	66.4	-37.1%	-1.2%
Wisconsin	130.6	134.8	372.9	185.5%	2.3%
Wyoming	19.3	140.3	36.1	87.8%	1.5%

Note: Arizona and U.S. territories not included.

¹ Acute care expenditures for non-elderly, non-SSI.

² See Chapter II.

decreasing the magnitude of difference between the ability to pay/needs based formula and the current system.

If the distribution of payment requirements by the Moon and Liska index was constrained such that no state was required to pay more than 50 percent of the current Medicaid acute care spending in the state (including federal and state shares), and no state was to contribute less than 17 percent of the current Medicaid spending in the state, the average percentage change faced by states would fall (see Table IV.2, column D). Eighteen states would face increases in their state spending of 25 percent or more (down from 26 states under the first method), with only one state (Utah) experiencing an increase of over 90 percent. Seven states would experience no payment change at all, and four states would face increases of less than 10 percent. The two states facing the largest increase (1.7%) relative to their total non-federal revenues are Alabama and Utah; 9 states would face increases of over 1 percent. Only 9 states would experience savings (reductions in state spending) relative to current payments, including California, New York, and the District of Columbia.

Although using the boundaries on current system payments to adjust the ability to pay/needs based index decreases the volatility of change significantly for the states, it tends to benefit those states gaining the most from the current boundaries and hurt those states which, by virtue of their relatively low ability to pay, are below their federal maximums (i.e., the states with current federal matching rates of more than 50 percent). For example, Connecticut, with a TTR based index of 205.9—more than twice the national average under this broad ability to pay and health care needs measure—currently receives a federal matching rate of the minimum 50 percent. If the “pure” method of using the TTR based index to calculate payment requirements were used, Connecticut would face a payment increase of more than 80 percent. Using the

Table IV.2

EFFECT OF A TTR/POVERTY BASED INDEX (WITH CONSTRAINTS) ON STATE PAYMENT REQUIREMENTS

State	(A) Current state spending ¹ (in millions \$)	(B) Index based upon TTR and percent < 150% of poverty ²	(C) State spending based upon (B), 50/83% constraints ³ (in millions \$)	(D) Percentage change from (A) to (C)	(E) Change as a percentage of total nonfederal revenues
National Total	14,542.3	100.0	14,542.3	0.0%	0.0%
Alabama	98.7	72.0	172.9	75.1%	1.7%
Alaska	67.9	127.6	49.6	-27.0%	-0.5%
Arkansas	67.3	70.5	111.6	65.7%	1.0%
California	2169.9	91.2	1,861.1	-14.2%	-0.6%
Colorado	154.3	127.0	169.2	9.7%	0.3%
Connecticut	203.0	205.9	203.0	0.0%	0.0%
Delaware	38.0	144.8	38.0	0.0%	0.0%
District of Columbia	100.8	144.2	55.8	-44.7%	n/a
Florida	712.0	91.9	791.6	11.2%	0.3%
Georgia	385.4	98.6	441.2	14.5%	0.6%
Hawaii	68.1	68.2	52.1	-23.6%	-0.4%
Idaho	35.8	84.3	59.4	65.9%	1.5%
Illinois	867.5	109.3	838.8	-3.3%	-0.2%
Indiana	356.9	105.7	395.3	10.8%	0.5%
Iowa	110.3	132.0	148.0	34.2%	0.6%
Kansas	93.0	130.2	111.2	19.6%	0.4%
Kentucky	166.5	83.5	207.1	24.1%	0.5%
Louisiana	225.0	73.4	207.6	-7.8%	-0.2%
Maine	69.4	79.7	65.1	-6.2%	-0.2%
Maryland	335.4	157.2	335.4	0.0%	0.0%
Massachusetts	430.8	119.0	430.8	0.0%	0.0%
Michigan	520.6	112.5	589.4	13.2%	0.5%
Minnesota	187.2	137.3	207.7	10.9%	0.2%
Mississippi	73.7	51.3	88.7	20.3%	0.4%
Missouri	192.0	103.0	241.6	25.8%	0.7%
Montana	25.5	73.9	40.2	57.2%	0.9%
Nebraska	67.3	137.1	86.9	29.3%	0.7%
Nevada	56.7	120.2	59.4	4.8%	n/a
New Hampshire	45.3	139.7	45.3	0.0%	0.0%
New Jersey	507.2	137.1	507.2	0.0%	0.0%
New Mexico	54.2	60.3	63.0	16.2%	n/a
New York	2187.8	87.8	1,051.2	-52.0%	-3.0%
North Carolina	356.0	109.0	492.6	38.3%	1.3%
North Dakota	18.8	107.2	33.8	79.9%	1.3%
Ohio	603.2	110.2	758.8	25.8%	0.8%
Oklahoma	113.7	81.2	172.1	51.4%	1.1%
Oregon	116.3	92.9	154.6	32.9%	0.5%
Pennsylvania	444.9	100.1	499.7	12.3%	0.3%
Rhode Island	63.9	101.2	67.0	4.8%	0.2%
South Carolina	126.0	82.7	196.8	56.2%	1.1%
South Dakota	19.2	98.2	32.4	68.2%	1.4%
Tennessee	267.2	82.7	274.8	2.8%	0.1%
Texas	839.3	95.4	1,114.3	32.8%	1.1%
Utah	54.0	89.1	106.7	97.5%	1.7%
Vermont	26.6	103.3	33.1	24.6%	0.7%
Virginia	262.4	141.8	262.4	0.0%	0.0%
Washington	301.5	137.8	335.1	11.2%	0.3%
West Virginia	105.6	66.2	88.5	-16.2%	-0.5%
Wisconsin	130.6	134.8	165.0	26.3%	0.3%
Wyoming	19.3	140.3	29.3	52.0%	0.9%

Note: Arizona and U.S. territories not included.

¹ Acute care expenditures for non-elderly, non-SSI.² See Chapter II.³ The constraints are that the federal government will pay no more than 83% and no less than 50% of current total Medicaid spending in a state

“bounded” TTR based method, Connecticut would pay no more than it does today. As a result of the bounded method’s gains to “wealthy” states such as Connecticut, states who are less well off (who have federal matching rates in excess of 50 percent) and have the most to gain from an improvement in the allocation of payment obligations, will be forced to sacrifice their potential gains if budget neutrality is required.²² For example, under the “pure” TTR-based method, Tennessee’s payments would fall by approximately 14 percent, relative to today’s spending. Under the bounded method, Tennessee would face an increase of about 3 percent, relative to current outlays. If the boundary method were imposed without redistributing the costs incurred as a result of protecting the wealthier states, the program would be underfunded by approximately \$1.5 billion, about 12 percent of the total required of the states.

A related alternative is to use the “pure” Moon and Liska index allocation, but to bound state losses (or both gains and losses) by a fixed percentage of their current spending. For example, a boundary could be set such that a state would never do worse than a MOE requirement that was 10 percent above their current level of spending, and an additional boundary could be used such that a state would never do better than a MOE requirement that was 10 percent below their current level of spending. Table IV.3 shows the implications of these modifications. Budget neutrality is a significant issue under the scenarios where only the magnitude of state payment increases are limited. By constraining state payment increases to 10 percent, aggregate collections from states would be 12 percent below the current system. A 20 percent constraint on state payment increases would imply a 10 percent financing shortfall relative to aggregate state payments under the current system. The neutrality problem is

²² If budget neutrality is not required, gains to one state (relative to today) do not have to be offset by losses to another state (or states). As mentioned previously, however discussions during the 1993/94 health reform effort were always couched in terms of budget neutrality.

Table IV.3

PLACING 10 & 20 PERCENT BOUNDARIES ON A TTR/POVERTY BASED INDEX
(millions of dollars)

	(A) State spending based upon TTR/Poverty Index, with no constraints ¹	10 Percent Boundaries		20 Percent Boundaries	
		(B) State spending based upon (A) but with increases constrained to be $\leq 10\%$ of current system spending	(C) State spending based Upon (A) but with changes constrained to be within $\pm 10\%$ of current system spending	(D) State spending based Upon (A) but with increases constrained to be $\leq 20\%$ of current system spending	(E) State spending based Upon (A) but with changes constrained to be within $\pm 20\%$ of current system spending
National Total	14,542.3	12,730.6	14,444.8	13,159.3	14,285.4
Alabama	165.1	108.6	108.6	118.5	118.5
Alaska	41.6	41.6	61.1	41.6	54.3
Arkansas	93.6	74.1	74.1	80.8	80.8
California	1,560.9	1,560.9	1,952.9	1,560.9	1,735.9
Colorado	243.8	169.7	169.7	185.1	185.1
Connecticut	374.2	223.3	223.3	243.6	243.6
Delaware	55.4	41.8	41.8	45.6	45.6
District of Columbia	46.8	46.8	90.7	46.8	80.7
Florida	686.5	686.5	686.5	686.5	686.5
Georgia	370.0	370.0	370.0	370.0	370.0
Hawaii	43.7	43.7	61.3	43.7	54.5
Idaho	49.8	39.4	39.4	42.9	42.9
Illinois	703.5	703.5	780.7	703.5	703.5
Indiana	331.5	331.5	331.5	331.5	331.5
Iowa	205.0	121.4	121.4	132.4	132.4
Kansas	181.6	102.3	102.3	111.6	111.6
Kentucky	173.7	173.7	173.7	173.7	173.7
Louisiana	174.1	174.1	202.5	174.1	180.0
Maine	54.6	54.6	62.5	54.6	55.5
Maryland	428.4	369.0	369.0	402.5	402.5
Massachusetts	395.4	395.4	395.4	395.4	395.4
Michigan	588.3	572.7	572.7	588.3	588.3
Minnesota	340.1	205.9	205.9	224.6	224.6
Mississippi	74.4	74.4	74.4	74.4	74.4
Missouri	296.4	211.3	211.3	230.5	230.5
Montana	33.7	28.1	28.1	30.7	30.7
Nebraska	121.6	74.0	74.0	80.7	80.7
Nevada	89.0	62.3	62.3	68.0	68.0
New Hampshire	86.4	49.8	49.8	54.4	54.4
New Jersey	594.2	557.9	557.9	594.2	594.2
New Mexico	52.9	52.9	52.9	52.9	52.9
New York	881.6	881.6	1,969.0	881.6	1,750.3
North Carolina	413.1	391.6	391.6	413.1	413.1
North Dakota	37.7	20.7	20.7	22.6	22.6
Ohio	673.2	663.6	663.6	673.2	673.2
Oklahoma	144.3	125.0	125.0	136.4	136.4
Oregon	153.1	127.9	127.9	139.5	139.5
Pennsylvania	665.5	489.4	489.4	533.9	533.9
Rhode Island	56.2	56.2	57.5	56.2	56.2
South Carolina	165.1	138.6	138.6	151.2	151.2
South Dakota	38.6	21.2	21.2	23.1	23.1
Tennessee	230.5	230.5	240.5	230.5	230.5
Texas	934.6	923.2	923.2	934.6	934.6
Utah	89.4	59.4	59.4	64.8	64.8
Vermont	32.7	29.2	29.2	31.9	31.9
Virginia	502.4	288.6	288.6	314.9	314.9
Washington	392.9	331.6	331.6	361.8	361.8
West Virginia	66.4	66.4	95.1	66.4	84.5
Wisconsin	372.9	143.7	143.7	156.7	156.7
Wyoming	36.1	21.2	21.2	23.1	23.1

Note: Arizona and U.S. territories not included.

¹ See Chapter II.

corrected substantially when using limits on both payment increases and decreases—in the case of a 10 percent constraint, collections would be less than 1 percent below the current system, and less than 2 percent low in the case of a 20 percent constraint.

Another option for determining payment obligations by state is to convert the ability to pay/needs based index into a matching rate for each state, and apply that matching rate to total current spending (state plus federal) in the state. Again, by reducing the magnitude of the changes faced by the states for practical reasons, we sacrifice some of the gain in equity that could be achieved from changes independent of past distributions of obligations and historical preferences for spending. And, as mentioned in the previously cited literature, the functional form of the FMAP (including the .45 coefficient, below) is quite arbitrary.

The index can be converted into an FMAP by substituting

$$\frac{\text{index}_i}{100}$$

for the fiscal capacity measure

$$\left(\frac{\text{state per capita personal income}}{\text{national per capita personal income}} \right)^2$$

in the current FMAP formula.²³

The resulting FMAPs are shown in Table IV.4, column B. Applying these matching percentages to current total Medicaid spending in each state (column A), produces state obligations

²³ Such a substitution would imply a revised FMAP formula as follows:

$$FMAP = \left(1 - \left(\frac{\text{index}_i}{100} \right) * .45 \right),$$

where $(50\% \leq FMAP \leq 83\%)$.

as shown in column C. Under this method, thirty four states would face increases in state payments. however, only 11 of these states would be experience an increase of 25 percent or higher. The largest relative increase is for North Dakota, 69.4 percent. Seven of the states facing increases would have their payments rise by 10 percent or less. Sixteen states would experience reductions in state spending as a result of such a change, with four of these states achieving reductions of 10 percent or more.

The state payment effects of the seven models described in this section are summarized in table IV.5.

Taking Relative Changes into Account Over Time. Updates in MOE requirements would be necessary mainly to take into account changes in states' relative economic/health status over time. Recessions concentrated in particular sectors of the economy could adversely affect specific states or regions, for example. Certain states might experience a specific epidemiological change, as was true for California and New York with regard to the onset of AIDS. In addition, social policy changes within a state could affect the relative size of that state's low income population. Fixing MOE payments through time would mean ignoring some significant shifts in state economies or health status indicators.

How often should updates of the MOE formula be performed? Several options exist for timing updates. First, updates might occur at regular intervals, such as every two to five years. Second, updates might occur at the request of a state. A state government could request an update when the state seems to be experiencing an economic or health crisis in apparent disparity with other states. At such a request, all states would be re-evaluated relative to each other. Such

Table IV.4

EFFECT OF A TTR/POVERTY BASED FMAP (WITH CONSTRAINTS) ON STATE PAYMENT REQUIREMENTS

	(A) Current state spending ¹ (in millions \$)	(B) FMAPs based upon TTR and <150% poverty index ²	(C) State spending based upon (B), constraints ³ (in millions \$)	(D) Percentage change from (A) to (C)	(E) Change as a percentage of total nonfederal revenues
National Total	14,542.3		14,542.3	0.0%	0.0%
Alabama	98.7	67.6%	109.3	10.7%	0.2%
Alaska	67.9	50.0%	66.3	-2.4%	0.0%
Arkansas	67.3	68.3%	81.5	21.0%	0.3%
California	2169.9	59.0%	1,736.8	-20.0%	-0.8%
Colorado	154.3	50.0%	165.1	7.0%	0.2%
Connecticut	203.0	50.0%	198.1	-2.4%	-0.1%
Delaware	38.0	50.0%	37.1	-2.4%	0.0%
District of Columbia	100.8	50.0%	98.4	-2.4%	n/a
Florida	712.0	58.7%	638.6	-10.3%	-0.3%
Georgia	385.4	55.6%	439.8	14.1%	0.5%
Hawaii	68.1	69.3%	40.8	-40.1%	-0.6%
Idaho	35.8	62.1%	46.0	28.5%	0.6%
Illinois	867.5	50.8%	832.5	-4.0%	-0.2%
Indiana	356.9	52.4%	450.2	26.2%	1.2%
Iowa	110.3	50.0%	144.4	30.9%	0.5%
Kansas	93.0	50.0%	108.5	16.6%	0.4%
Kentucky	166.5	62.4%	215.7	29.5%	0.7%
Louisiana	225.0	67.0%	275.8	22.6%	0.6%
Maine	69.4	64.1%	63.6	-8.4%	-0.2%
Maryland	335.4	50.0%	327.3	-2.4%	-0.1%
Massachusetts	430.8	50.0%	420.3	-2.4%	-0.1%
Michigan	520.6	50.0%	575.1	10.5%	0.4%
Minnesota	187.2	50.0%	202.6	8.2%	0.2%
Mississippi	73.7	76.9%	79.1	7.3%	0.2%
Missouri	192.0	53.6%	218.6	13.8%	0.4%
Montana	25.5	66.7%	28.5	11.6%	0.2%
Nebraska	67.3	50.0%	84.8	26.1%	0.6%
Nevada	56.7	50.0%	57.9	2.2%	n/a
New Hampshire	45.3	50.0%	44.2	-2.4%	-0.1%
New Jersey	507.2	50.0%	494.8	-2.4%	-0.1%
New Mexico	54.2	72.9%	54.9	1.2%	n/a
New York	2187.8	60.5%	1,687.4	-22.9%	-1.3%
North Carolina	356.0	50.9%	500.1	40.5%	1.3%
North Dakota	18.8	51.8%	31.9	69.4%	1.2%
Ohio	603.2	50.4%	734.2	21.7%	0.7%
Oklahoma	113.7	63.4%	133.7	17.6%	0.4%
Oregon	116.3	58.2%	126.2	8.5%	0.1%
Pennsylvania	444.9	55.0%	439.2	-1.3%	0.0%
Rhode Island	63.9	54.5%	61.2	-4.2%	-0.1%
South Carolina	126.0	62.8%	159.3	26.4%	0.5%
South Dakota	19.2	55.8%	27.9	45.0%	0.9%
Tennessee	267.2	62.8%	299.3	12.0%	0.5%
Texas	839.3	57.1%	988.1	17.7%	0.6%
Utah	54.0	59.9%	85.5	58.3%	1.0%
Vermont	26.6	53.5%	30.0	13.1%	0.4%
Virginia	262.4	50.0%	256.0	-2.4%	-0.1%
Washington	301.5	50.0%	327.0	8.4%	0.2%
West Virginia	105.6	70.2%	129.6	22.7%	0.8%
Wisconsin	130.6	50.0%	161.0	23.2%	0.3%
Wyoming	19.3	50.0%	28.6	48.3%	0.8%

Note: Arizona and U.S. territories not included.

¹ Acute care expenditures for non-elderly, non-SSI.

² See Chapter II.

³ The constraints are: budget neutrality and the federal government will pay no more than 83% and no less than 50% of current total Medicaid spending in a state.

Table IV.5

SUMMARY OF MODEL RESULTS

Model	Number of states experiencing savings (average % change)	Number of states experiencing losses (average % change)	Budget effect in aggregate ¹ (in millions of \$)
TTR/Poverty based index, no constraints; budget neutral.	16 (- 23.0%)	34 (+ 54.0%)	\$0
TTR/Poverty based index, with constraint that the federal govt. will pay no more than 83% & no less than 50% of current total Medicaid spending in each state; budget neutral.	9 (- 21.7%)	34 (+ 33.1%)	\$0
TTR/Poverty based index, with constraint that a state will not face an increase in excess of 10%; not budget neutral.	16 (- 23.0%)	34 (+ 9.6%)	\$1,886
TTR/Poverty based index, with constraint that a state will not experience an increase or a decrease in excess of 10%; not budget neutral.	16 (- 8.5%)	34 (+ 9.6%)	\$96
TTR/Poverty based index, with constraint that a state will not face an increase in excess of 20%; not budget neutral.	16 (- 23.0%)	34 (+ 18.1%)	\$1,453
TTR/Poverty based index, with constraint that a state will not experience an increase or a decrease in excess of 20%; not budget neutral.	16 (- 14.4%)	34 (+ 18.1%)	\$259
TTR/Poverty Based FMAP with constraint that the federal govt will pay no more than 83% and no less than 50% of current total Medicaid spending in a state, and budget neutrality.	16 (- 7.9%)	34 (+ 21.0%)	\$0

¹ A positive number here connotes a savings to the state governments in aggregate relative to current Medicaid spending on the discontinued programs, and, implicitly, an increase in costs to the federal government relative to the current system.

requests would be binding in that, if the requesting state was found to be relatively better off rather than worse off, changes to the MOE requirement would still be instituted. In this way, states might be less likely to engender a frivolous and costly update. Third, an advisory commission or perhaps the President's Council of Economic Advisors in conjunction with the Centers for Disease Control, could be given the responsibility of deciding when an update would be appropriate. These options could also be combined, for example, by requiring regular periodic updates while allowing states or an advisory commission to request an interim update.

Additional complications with updates are assured, however, when considering extensive phase-in periods such as those discussed previously. In a situation with phase-ins of 10 years or more, updates would be necessary during the initial schedule, complicating the consistency and predictability of the phase-in itself.

Finally, while updating MOE requirements, attention should be paid to progress in the available measures of the indicators of state ability to pay and health needs. Statutory responsibility should be given to a group or agency for regular review of potential improvements to the formula.

Enforcement of Changes in State Requirements. Changes in the FMAP, while engendering hostility from "losing" states, allow states to decline to participate in the program—Medicaid payments are not requirements in the true sense of the word. The new programs discussed thus far have not been voluntary from the states' perspective, though many have been voluntary from the standpoint of enrollees. It is unclear from the language of proposals incorporating a state MOE what the repercussions would be for states which do not meet their legal obligations.

Allowing opt out skirts the difficult issues of federal enforcement, and maintains the existing nature of the state/federal partnership. However, opt out also means that low income persons in

certain states might not have access to assistance through the new program, potentially exacerbating current cross-beneficiary inequities.

Treating MOE as a Temporary Measure. An option not discussed during the past year's debate is using MOE payments as a transitional financing mechanism, one that could be replaced by full federal financing over time. Consistency and equity across states might necessitate such a move to full federal financing. Differences in program benefits, administration, and financing burdens have long been complaints with the Medicaid program. Although reform of the FMAP formula for use in setting MOE payments would address the issue of financing inequity, the controversial nature of such changes might be enough to make an appropriate formula not politically viable.

MOE based upon current payments might be an acceptable alternative if MOE were viewed as an interim measure. If broad based financing was a near term objective, say within 5 years, one might be able to look beyond the current system inequities. In addition, full federal financing might allow avoidance of inequities resulting from providing state program flexibility. In addition, treating MOE as a transitional measure also avoids the expense of developing and/or refining appropriate measures for use in a new payment formula. Issues related to updating and revising such measures over time would also be obviated.

The downside to moving towards full federal financing is, of course, the difficulty of proposing/implementing broad based taxes in the current political climate. However, in light of the complications inherent in implementing an equitable resource/health care needs based measure of state requirements, it is unclear that full federal financing is much more difficult.

Conclusions

A number of options for an equitable allocation of state obligations under health care reform exist. The advisability and political acceptability of such options are far from clear, however. Although many analysts will agree that the current distribution of Medicaid payments does not sufficiently reflect relative state ability to pay or need, attempting to redistribute state payments in a more appropriate and budget neutral manner also brings a host of problems.

Requiring budget neutrality while using an index which better accounts for state differences in ability to pay and need, such as that proposed by Moon and Liska in Chapter II, would generate large percentage changes in payment obligations for many states. Such changes, unless associated with lengthy phase-in schedules, can be expected to cause disruptions in the economies of many of these states.

A number of mechanisms could be used to reduce the magnitude of the changes suggested by indices such as this one, however, such adjustments would serve to reduce the equity gains from adopting the alternative. Such adjustments would likely be arbitrary in nature, with their gains going predominantly to those states with the greatest ability to pay.

Maintenance of effort requirements also fundamentally change the nature of the federal/state fiscal relationship. As opposed to current Medicaid arrangements which are voluntary, MOE payments would be mandatory, and could lead to higher spending over time for many or even all states, depending upon the cost containment measures included in the reform proposal.

In a context where matching payments from the federal government are being eliminated, and concern about financing fairness is genuine, it might be more appropriate to think about MOE requirements as a short term strategy. In the interest of implementing an equitable distribution of payment obligations under a mandatory program, the focus of attention should be options for

phasing away from MOE requirements based upon the current distribution of spending toward broad based federal taxation, as politically difficult as this may be, in exchange for tax relief at the state and/or local level.

Although many policy-makers perceived maintenance of effort requirements as a painless mechanism for financing a share of national reforms, this is not the case. Allowing inequities in obligations to persist in the long term is likely to make the financing of reforms vulnerable, while there are no easy fixes to the current system inequities. Unfortunately, implementing a new, more equitable system is complicated by the realities of our current situation. Although political sensibilities seem consistently offended by the concept of taxation, no new financing system is likely to even approach fiscal fairness without it.

References for Chapter IV

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Chapter IV - APPENDIX

CALCULATION OF THE CONVERSION FACTOR

	(A) Index based upon TTR and percent < 150% of poverty ¹	(B) Population	(C) Index * Population (A) * (B)
National Total	100.0	251,244,749	26,238,257,254
Alabama	72.0	4,137,511	297,888,254
Alaska	127.6	587,766	75,003,602
Arkansas	70.5	2,394,253	168,912,093
California	91.2	30,895,356	2,816,319,842
Colorado	127.0	3,464,675	439,895,138
Connecticut	205.9	3,279,116	675,248,176
Delaware	144.8	690,884	100,016,502
District of Columbia	144.2	585,221	84,386,417
Florida	91.9	13,482,716	1,238,648,652
Georgia	98.6	6,773,364	667,609,833
Hawaii	68.2	1,155,726	78,783,767
Idaho	84.3	1,065,885	89,840,810
Illinois	109.3	11,612,906	1,269,254,486
Indiana	105.7	5,658,323	598,159,048
Iowa	132.0	2,802,944	369,883,301
Kansas	130.2	2,515,320	327,614,886
Kentucky	83.5	3,753,836	313,459,365
Louisiana	73.4	4,278,889	314,071,878
Maine	79.7	1,236,348	98,540,996
Maryland	157.2	4,917,269	772,863,948
Massachusetts	119.0	5,992,712	713,373,965
Michigan	112.5	9,433,665	1,061,427,265
Minnesota	137.3	4,468,165	613,667,595
Mississippi	51.3	2,615,208	134,176,185
Missouri	103.0	5,190,719	534,713,884
Montana	73.9	822,347	60,762,823
Nebraska	137.1	1,600,524	219,450,610
Nevada	120.2	1,336,000	160,547,232
New Hampshire	139.7	1,115,087	155,819,823
New Jersey	137.1	7,820,260	1,072,155,518
New Mexico	60.3	1,551,830	95,370,474
New York	87.8	18,109,491	1,590,704,697
North Carolina	109.0	6,836,333	745,344,976
North Dakota	107.2	634,031	67,981,480
Ohio	110.2	11,021,419	1,214,566,411
Oklahoma	81.2	3,205,234	260,403,734
Oregon	92.9	2,971,567	276,199,850
Pennsylvania	100.1	11,995,405	1,200,704,840
Rhode Island	101.2	1,001,344	101,311,144
South Carolina	82.7	3,602,354	297,862,790
South Dakota	98.2	708,411	69,575,189
Tennessee	82.7	5,025,261	415,824,033
Texas	95.4	17,682,538	1,686,210,605
Utah	89.1	1,811,215	161,385,207
Vermont	103.3	571,334	59,028,532
Virginia	141.8	6,394,481	906,537,933
Washington	137.8	5,142,746	708,904,943
West Virginia	66.2	1,808,860	119,830,246
Wisconsin	134.8	4,992,664	672,798,498
Wyoming	140.3	464,736	65,215,775

Note: Arizona and U.S. territories not included.

¹ See Chapter 2.

$$CF = \frac{STATES * Pop_N}{\sum Index_i * Pop_i}$$

care expenditures for the non-elderly,
non-SSI Medicaid population. In 1993,
STATE\$= 14,542,305,225

Total Population, Pop(N)=
251,244,749

The sum of index*population over all
states = 26,238,257,254

So,

$$CF = \frac{14.5b * 251.2m}{26.2b} = 139.3m$$

CHAPTER V: TRANSITION ISSUES AND CONCLUSIONS

As shown in the previous chapters, even modest changes in the Federal Medical Assistance Percentage (FMAP) formula or in the allocation of disproportionate share payments can strongly affect what happens to federal dollars going to the states. Whether this is done separately or as a broader reform using the FMAP to establish maintenance of effort on the part of states, it is difficult to know how to begin implementing any changes. The inherent existence of winners and losers whenever a fixed supply of federal dollars are reallocated across the states raises a number of political issues and problems.

Thus, a final issue to be considered in thinking through how policies for allocating federal funds across states might change over time is the question of the transition process necessary to move to a new allocation. Most of this analysis has focused on ways to improve these mechanisms for directing funds. But it is also appropriate to consider some of the practical transition issues that would be confronted if we were to move to such a system. A number of specific questions arise, including:

- How long should a transition process last?
- Is this necessarily a budget neutral process as far as the federal government is concerned?
- Should state winners and losers from policy changes be treated symmetrically?
- Should transitional issues vary depending upon what type of reform is contemplated?

We briefly consider each of these issues in this concluding chapter. But first, we summarize the basic findings outlined above in Chapters II, III and IV.

SUMMARY OF FINDINGS

The most straightforward way to change the matching formula for Medicaid would be to alter the FMAP. Since this formula was designed to deal with the fiscal capacity of states--that is, how well they are able to support the matching amounts they are required to make under Medicaid--much of the analysis in Chapter II focuses on the issue of improving that fiscal capacity measure. Measures considered included an adjusted per capita personal income (PCPI) measure, the ACIR's Representative Revenue System (RRS), an adjusted version to deal with some of its faults, and the Department of Treasury's Total Taxable Resources (TTR) measure. We concluded that the TTR is the measure that best captures fiscal capacity in a workable framework. Consequently, that became the basic fiscal capacity measure used for further adjustments.

But states also differ in other important ways not now captured by the existing FMAP formula nor by simply replacing PCPI with TTR. Two other factors were also considered: adding an adjustment for differences in need for a Medicaid program as measured by various poverty indicators, and adjusting for differences in cost of living across states which can affect both the fiscal capacity and need measures. Thus, most of our attention focused on adding further adjustments to a TTR-based FMAP. The four basic alternatives, summarized in Table V.1, were:

- A TTR-based FMAP, replacing PCPI in the standard formula;
- A TTR-based FMAP corrected for state cost of living differences;
- A TTR-based FMAP adjusted for both state cost of living (COL) differences which also includes the percent of a state's population below 150 percent of the poverty threshold, also adjusted for cost of living differences;

- The TTR/COL/Poverty alternative with a reduced lower bound of 45 percent rather than 50 percent.

Each of these measures creates substantial numbers of state winners and losers. For example, via the last two options, 26 states would experience reimbursement gains or losses in excess of 20 percent.

Just as the current FMAP is found wanting, DSH payments are highly inequitable and inconsistent with Congressional intent. These payments are unevenly distributed across states depending upon how aggressively states sought such payments and how creative they were in financing them. One difference between FMAP changes and changes in the DSH program, however, is that policy can be more carefully targeted with a new DSH program to ensure that dollars are used for the purposes intended. For example, equalizing DSH payments per uninsured person or per person below 150 percent of poverty could assure that states with higher needs receive higher payments. But again there would be major redistributive effects from such changes. As shown in Table V.1, all states would be affected by changes in DSH. The changes summarized here assume the use of the third modified FMAP formula that is shown in Table V.1, and reallocations based either on numbers of uninsured persons or numbers of persons in poverty.

In Chapter IV, we turned to a different issue: how the federal/state relative shares should be established where states must achieve a maintenance of effort requirement. This would give states considerably less flexibility with regard to the amounts they would have to contribute, thus raising a number of additional issues. In this case, issues concerning a

Table V.1

SUMMARY OF RESULTS

	Number of States with FMAP Increases	Number of States with FMAP Decreases	Number of States With No Change In FMAP	Number of States With Federal Reimbursement Increases/Decreases of 20% or More
Federal Medical Assistance Percentage (FMAP) Option				
Total Taxable Resources (TTR)	21	19	10	7
TTR adjusted for cost of living (COL)	13	26	11	13
TTR adjusted for COL and population under 150% of poverty	8	33	9	26
TTR adjusted for COL and population under 150% of poverty—lower bound of 45%	8	42	0	26
	Number of States With Federal DSH Payment Increases	Number of States With Federal DSH Payment Decreases	Number of States With No Changes in Federal DSH Payments	Number of States With Federal DSH Payment Increases/Decreases of 20% or More
Changes in Disproportionate Share Hospital Payment Program				
Modify payments based on TTR/Poverty/ COL-based FMAP and number of uninsured individuals by state	26	24	0	46
Modify payments based on TTR/Poverty/ COL-based FMAP and number of individuals under 150% of poverty by state	22	28	0	41

transition period and protections for states become even more important. These issues are discussed below.

TRANSITION ISSUES

Any move to adopt a new FMAP or changes in disproportionate share payments would require careful planning and a period of transition. The need for such a transition is more apparent when such change is linked to other reforms as well, including a major health reform effort with state maintenance of effort requirements as discussed in Chapter IV. Other changes in policy might also occur at the same time--such as giving states more flexibility in some areas that would allow for them to better adjust to these changes. But even if the only change were a new requirement for balancing federal and state contributions, a period of time to phase in new rules would be necessary.

The Phase-in Period

Medicaid program experience over the last ten years has shown only moderate FMAP decreases (and hence increases in state shares) from one year to the next. The largest percentage change in an FMAP in the last ten years was experienced by New Hampshire with an FMAP decline from 54.92 in 1987 to 50.00 in 1988, an almost 9 percent drop. (And, perhaps at least partly in response, New Hampshire took extreme advantage of the disproportionate share hospital program, using it to leverage greater federal payments, thereby effectively increasing its FMAP.) FMAP declines in the range of 3-5 percent, however, were not unusual during the period.

Given this evidence, it would appear to be within the bounds of historical experience to allow FMAPs to change by approximately 4 percent per year. From past Medicaid experience, however, states that experienced significant increases in one year were unlikely to see significant increases the following years. Consequently, some conservatism might be called for in setting the time spans for states to phase-down to lower FMAPs or to phase-up to their new MOE requirements. But when losses for some states are in the range of 50 percent, is it feasible to establish a ten or twelve year phase-in period? A very long phase in might create its own disadvantages by postponing needed increases for states gaining under a formula change for example.

The Health Security Act debated in 1994 envisioned an eight year transition period. And introduction of changes in payment policy for hospitals under Medicare allowed at least a four year period for transition. In the case of Medicare payment changes, the transition used a blended average of old and new rules for payment with the weighted average gradually shifting to put more and more weight on the new rules over time. A similar approach of 4 or 5 years--or even longer--could be employed for the types of changes described in this paper.

The length of time might also depend upon how much flexibility states have in adjusting to a new FMAP or altered disproportionate share rules. The greater the degree of change and the less flexibility--particularly for states experiencing a decline in federal payments--the longer the transition period might need to be. But states that stand to gain from a change will likely seek a shorter transition while losing states will want a longer period to adjust. Whatever choices are made would likely be controversial.

The Federal Government and Budget Neutrality

The federal government could choose to ease a transition by reducing the losses to states from a proposed change, either temporarily or permanently. Distinctions could be made between winners and losers for some period of time in terms of qualifying dollars. A "hold harmless" provision for example, could be imposed that would establish the higher FMAP for states who are winners by a revised formula, but guarantee that losing states could retain the same absolute federal contribution if they met certain conditions over time, assuming a growing Medicaid program, the federal dollars received would approach the amount that a state should receive under a new formula. The problem is that states experiencing a large decline in the FMAP might not expand their Medicaid programs very rapidly, stretching out the transition process for a long time. At least for a transition period, all states would not be treated the same: rather, distinctions would be made between the losing and winning states. Such a policy would face a major hurdle, however, even for a transition period since the federal government would experience a substantial increase in its Medicaid expenditures. Budget neutrality would have to be waived.

Alternatively, bounds on how much any one state could lose (likely expressed as a limit on the number of percentage points that the FMAP would be allowed to decline) could be established. This could also be phased in over a transition period, perhaps with a permanent protection even after the transition period expired. Again, however, this would mean that the federal government would still make a larger contribution and many states would still be "losers." If bounds were established on both winners and losers, the change

could at least be kept budget neutral, but likely over strong objections from states who would otherwise qualify for substantial increases in federal contributions.

Finally, in a period of tight budgetary control, yet another possibility is a "negative" hold harmless position. If federal contributions to Medicaid are to be cut, adopting a new FMAP at the same time might mean that states that would "gain" under a new formula would simply be guaranteed not to lose, while all other states would face reductions in their FMAPs. That is, the basic multiplier that is now used to calibrate the formula could be adjusted to move all the FMAPs downward by some factor. The purpose of a new FMAP would then be to identify which states would be protected from cuts in the program.

Disproportionate share payment adjustments raise different types of practical problems, although again, the essential issue remains how quickly it is possible to phase in major losses for a few states. Perceptions about the inequities of the current disproportionate share program and its manipulation by a few states over time might make changes in this program somewhat less controversial, particularly if cutbacks on DSH in some states allowed relief for other states that have never had significant DSH programs.

How Transitional Issues Can Effect Reforms Differently

Transition complications are likely to arise as a result of any of the reforms discussed in this report. The type of reform, however, has significant implications for the difficulty in overcoming such problems. The greater the flexibility afforded to states with respect to options for absorbing financing changes, the easier the transition problems become. For example, maintenance of effort types of reforms can be the least flexible of those presented in



this report -- payment levels are determined, and "losers" must raise new revenues in order to meet these obligations.

Reforms of the matching formula and the mechanism for paying out DSH funds, on the other hand, allow states the added flexibility of being able to decrease state spending. For example, a lowered federal matching rate leaves a state with two options -- it can make up some or all of the difference between old and new federal dollars by raising new state revenues, or it can allow total state Medicaid spending to fall, leaving the state's own spending, unchanged.¹

The complexity of state political processes should not be underestimated when developing policy changes of this nature. States facing significant increases in contribution requirements and a public/political leadership unwilling to make the sacrifices necessary for allocating the sufficient amount of revenue may find themselves caught between a rock and a hard place. In the case of maintenance of effort requirements, it is unclear if the political process in each state would resolve such situations satisfactorily. At the very least, the budget cycles of states necessitate a certain grace period if new revenues are necessary to meet maintenance of effort requirements. One option to consider is to make some allowances for states to opt out of participation in the new program. Alternatively, an automatic backup mechanism, such as an income tax, could be federally triggered in a state that is unable to resolve its revenue problems in a timely manner. This may not, however, be feasible

¹Theoretically, the state also has a third option -- it can decrease its own spending on the Medicaid program as well. This is unlikely to occur, however. If a state values Medicaid enough to spend at a particular level, changes in federal contributions should not make the state value the program less.



politically. Given the sporadic scheduling of many state legislatures, a two year allowance for permitting state governments to pass their own plans does not seem unreasonable.

For changes in the FMAP or in the federal DSH payment calculation, the necessary time period prior to implementation need not necessarily be as long. State legislatures, unable to reach agreement on increasing state revenue to compensate for potential decreases in federal matching rates can opt to limit spending instead. Although the design of policies for cutting program spending is not a trivial undertaking, states facing these types of changes will be less likely to face policy deadlocks than those forced to raise new revenues as a result of MOE requirements. The exceptions may be those states facing such dramatic changes in DSH or matching fund percentages that modest program reductions would not feasibly address the financing changes.

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